



LEXIKON  
DER  
KOHLENSTOFF-VERBINDUNGEN  
SUPPLEMENT III.

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LEXIKON  
DER  
KOHLENSTOFF-VERBINDUNGEN

VON  
  
M. M. RICHTER.

SUPPLEMENT III

UMFASSEND  
  
DIE LITTERATURJAHRE 1903 UND 1904.

HAMBURG UND LEIPZIG  
VERLAG VON LEOPOLD VOSS  
1905

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# INHALT.

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# Abkürzungen. — Abbreviations. — Abréviations. — Abbreviazioni.

- A.* LIEBIG's Annalen der Chemie.
- A. ch.* Annales de chimie et de physique.
- Am.* American chemical Journal.
- Am. Soc.* Journal of the American chemical Society.
- A. Pth.* Archiv für experimentelle Pathologie und Pharmakologie.
- Ar.* Archiv der Pharmacie.
- B.* Berichte der Deutschen chemischen Gesellschaft.
- Bl.* Bulletin de la société chimique de Paris.
- Bulet.* Buletinul societății de științe din București.
- C.* Chemisches Centralblatt.
- C. r.* Comptes rendus de l'académie des sciences.
- Ch. J.* Chemische Industrie.
- Ch. Z.* Chemiker-Zeitung (Cöthen).
- Chem. N.* Chemical News.
- D.* DINGLER's Polytechnisches Journal.
- D.R.P.* Patentschrift des Deutschen Reiches.
- El. Ch. Z.* Elektrochemische Zeitschrift.
- Fr.* (FRESENIUS') Zeitschrift für analytische Chemie.
- Frdl.* FRIEDLÄNDER's Fortschritte der Theerfarbenfabrication (Berlin, SPRINGER).
- G.* Gazzetta chimica italiana.
- Gm.* L. GMELIN's Handbuch der organischen Chemie. 4. Aufl. Band 1—4 (1848—1870) und Supplementband 1—2 (1867—1868).
- Grh.* GERHARDT, Traité de chimie organique. 4 Bände. (1853—1856).
- H.* (HOPPE-SEYLER's) Zeitschrift für physiologische Chemie.
- J.* Jahresbericht der Chemie.
- J. pr.* Journal für praktische Chemie.
- J. r.* Journal der russischen physikalisch-chemischen Gesellschaft.
- J. Th.* Jahresbericht der Thierchemie.
- L. V. St.* Landwirthschaftliche Versuchsstationen.
- M.* Monatshefte für Chemie.
- P.* POGGENDORFF's Annalen der Physik und Chemie.
- P. C. H.* Pharmaceutische Centralhalle.
- P. Ch. S.* Proceedings of the Chemical Society.
- Ph. Ch.* Zeitschrift für physikalische Chemie.
- R.* Recueil des travaux chimiques des Pays-Bas.
- R. A. L.* Atti della reale Accademia dei Lincei (RENDICONTI)
- Soc.* Journal of the chemical Society of London.
- W.* Annalen der Physik (WIEDEMANN).
- Z.* Zeitschrift für Chemie.
- Z. a. Ch.* Zeitschrift für anorganische Chemie.
- Z. Ang.* Zeitschrift für angewandte Chemie.
- Z. B.* Zeitschrift für Biologie.
- Z. El. Ch.* Zeitschrift für Elektrochemie.
- Z. Kr.* Zeitschrift für Krystallographie.

# Abkürzungen. — Abbreviations. — Abréviations. — Abbreviazioni.

Anm.	Anmerkung	note	annotation	avvertenza
cor.	corrigirt	corrected	corrigé	corretto
d-	rechtsdrehend	dextrorotatory	destrogyre	destrogiro
f.	fest	solid	solide	sólido
fl.	flüssig	liquid	liquide	liquido
fum.	fumaröid	fumaroid	fumaroïde	fumaroide
h.	hochschmelzend	high melting	fond à haute tempéra-	che fonde alto
i-	inactiv	inactive	inactif [ture	inattivo
(i. D.)	im Dampf	in the vapour	dans la vapeur	nel vapore
isom.	isomer	isomeric	isomère	isomero
(i. V.)	im Vakuum	in a vacuum	dans le vide	nel vuoto
l-	linksdrehend	laevorotatory	lévogyre	levogiro
lab.	labil	unstable	instable	labile
m-	meta	meta	méta	meta
mal.	maleinöid	malenoid	malénoïde	maleinoide
norm.	normal	normal	normal	normal
o-	ortho	ortho	ortho	orto
p-	para	para	para	para
R.	Ring (cyklo)	ring (cyclic)	noyau (cyclo)	anello (cielo)
s.	symmetrisch	symmetrical	symétrique	simmetrico
Sd.	Siedepunkt	boiling point	point d'ébullition	punto di ebullizione
Sm.	Schmelzpunkt	melting point	point de fusion	punto di fusione
stab.	stabil	stable	stable	stabile
u. Zers.	unter Zersetzung	with decomposition	en se décomposant	con decomposizione
unc.	uncorrigirt	uncorrected	non corrigé	non corretto
uns.	unsymmetrisch	unsymmetrical	asymétrique	asinmetrico
Verb.	Verbindung	compound	combinaison	combinazione (com- [posto])

Häufiger vorkommende deutsche Ausdrücke.	Frequently occurring German Expressions.	Mots allemands souvent employés.	Vocaboli tedeschi più frequentemente usati.
Base	base	base	base
Kohlenwasserstoff	hydrocarbon	hydrocarbure	idrocarburo
Lit. (Literatur) be- deutend	literature abundant	bibliographie consi- dérable	Letteratura ricca, copiosa
Säure	acid	acide	acido
Salze meist bek. (be- kannt)	most salts known	beaucoup de sels connus	i sali sono in gran parte noti
Verbindung aus	compound of	dérivé de	composto ottenuto da
aus	from	de	da
bei	at	à	a
oder	or	ou	o (oppure)
siehe auch	see also	à comparer	vedi anche
wasserfrei	anhydrous	anhydre	anidro

- 1) Ein „Stern“ vor der Ordnungsnummer bedeutet, dass die Verbindung schon im Stammwerk unter der gleichen Nummer beschrieben ist.  
 2) Die mit einem „Stern“ versehene „Beilstein-Notiz“ bezieht sich auf die Ergänzungsbände.

### C<sub>1</sub>-Gruppe.

- CO<sub>2</sub> \*1) Kohlensäure (*J. pr.* [2] 67, 423 *C.* 1903 [1] 1387).  
 CCl<sub>4</sub> \*1) Tetrachlormethan (*G.* 33 [1] 77 *C.* 1903 [1] 1109).  
 CS \*1) Kohlenstoffmonosulfid (*Soc.* 81, 1538 *C.* 1903 [1] 7, 127; *Z. a. Ch.* 34, 187 *C.* 1903 [1] 808; *B.* 36, 4336 *C.* 1904 [1] 437).  
 CMO \*1) Kohlenstoffmolybdän (*B.* 37, 3324 *C.* 1904 [2] 1022).

### — I II —

- CHN \*1) Cyanwasserstoffsäure (*C.* 1903 [1] 494).  
 CHCl<sub>3</sub> \*1) Chloroform. Sm. — 63,2° (*C.* 1904 [1] 1195).  
 CHBr<sub>3</sub> \*1) Bromoform (*C.* 1904 [2] 301).  
 CHI<sub>3</sub> \*1) Jodoform (*C.* 1903 [1] 918; 1904 [1] 995).  
 CH<sub>2</sub>O \*1) Aldehyd d. Ameisensäure. + HBr. (*C.* 1903 [2] 709).  
 CH<sub>2</sub>O<sub>2</sub> \*1) Ameisensäure. NH<sub>4</sub> (*M.* 23, 1034 *C.* 1903 [1] 386; *B.* 36, 1783 *C.* 1903 [2] 189; *C. r.* 136, 1465 *C.* 1903 [2] 282; *B.* 36, 4351 *C.* 1904 [1] 356).  
 CH<sub>2</sub>O<sub>4</sub> \*1) Uebersäure. Na<sub>2</sub> + 1½ H<sub>2</sub>O, K<sub>2</sub> (*B.* 32, 1544 *C.* 1903 [1] 494; *D.R.P.* 145746 *C.* 1903 [2] 1034).  
 CH<sub>2</sub>N<sub>2</sub> \*2) Diazomethan (*M.* 24, 364 *C.* 1903 [2] 507).  
 CH<sub>2</sub>Br<sub>2</sub> \*1) Dibrommethan (*M.* 24, 783 *C.* 1904 [1] 157).  
 CH<sub>2</sub>S<sub>3</sub> \*1) Trithiokohlensäure. Salze siehe (*B.* 36, 1146 *C.* 1903 [1] 1176).  
 CH<sub>2</sub>F<sub>2</sub> \*1) Fluormethan. Sd. — 78° bei 742,5° (*Soc.* 85, 1317 *C.* 1904 [2] 1281).  
 CH<sub>2</sub>As \*1) Arsenmethyl. C<sub>2</sub>H<sub>5</sub>As, ? Sd. 190°<sub>13</sub> (*C. r.* 138, 1705 *C.* 1904 [2] 415).  
 CH<sub>2</sub>N \*1) Methylamin. (HCl, 2HgCl<sub>2</sub>) (*J. pr.* [2] 66, 406 *C.* 1903 [1] 561; *B.* 36, 3945 *C.* 1904 [1] 352).  
 CH<sub>2</sub>N<sub>3</sub> \*1) Guanidin. (HCl, 2CdCl<sub>2</sub>) (*C.* 1903 [2] 211; *B.* 36, 3024 *C.* 1903 [2] 957; *H.* 43, 72 *C.* 1904 [2] 1610).  
 CH<sub>2</sub>N<sub>6</sub> C 11,5 — H 7,7 — N 80,8 — M. G. 104.  
 \*1) Hydrazondihydrazidomethan (Triamidoguanidin). HCl (*B.* 37, 3548 *C.* 1904 [2] 1379).  
 CO<sub>2</sub>N<sub>4</sub> \*1) Tetranitromethan (*B.* 36, 2225 *C.* 1903 [2] 421).  
 CBr<sub>4</sub>S<sub>2</sub> \*1) Verbindung. (*C.* 1903 [1] 19).

### — I III —

- CHO<sub>2</sub>N<sub>3</sub> \*1) Trinitromethan. NH<sub>4</sub> (*B.* 36, 2227 *C.* 1903 [2] 421; *G.* 33 [2] 323 *C.* 1904 [1] 256).  
 CHNS \*1) Rhodanwasserstoffsäure. Salze siehe (*C.* 1903 [2] 550; *Am.* 29, 474 *C.* 1903 [1] 1307; *Am.* 30, 145 *C.* 1903 [2] 715; *Am.* 30, 184 *C.* 1903 [2] 873).  
 CH<sub>2</sub>O<sub>2</sub>N<sub>2</sub> \*1) Methylnitrolsäure. Sm. 68° u. Zers. (*G.* 33 [1] 510 *C.* 1903 [2] 937).  
 CH<sub>2</sub>O<sub>4</sub>N<sub>2</sub> \*1) Dinitromethan. K, Phenylhydrazinsalz, Benzylaminsalz (*B.* 35, 4289 *C.* 1903 [1] 279).

- $\text{CH}_3\text{ON}$  \*1) Formaldoxim (*B.* 35, 4301 *C.* 1903 [1] 280).  
 \*2) Amid d. Ameisensäure. ( $2\text{HCl}$ ,  $\text{PtCl}_4$ ) (*B.* 36, 154 *C.* 1903 [1] 444).  
 $\text{CH}_3\text{OAs}$  \*1) Arsenmethoxyd. Sm. 95° (*C. r.* 137, 926 *C.* 1904 [1] 80).  
 $\text{CH}_3\text{O}_2\text{N}$  \*1) Nitromethan (*B.* 35, 4300 *C.* 1903 [1] 280; *B.* 36, 3297 *C.* 1903 [2] 1164).  
 \*4) Formhydroxamsäure (*B.* 35, 4299 *C.* 1903 [1] 280).  
 $\text{CH}_3\text{Cl}_3\text{Sn}$  1) Methylzinnchlorid. Sm. 43° (105—107°); Sd. 179—180° (*C.* 1903 [2] 106, 553; *B.* 36, 3027 *C.* 1903 [2] 938).  
 $\text{CH}_3\text{Br}_3\text{Sn}$  1) Methylzinnbromid. Sm. 50—55° (53°) (*C.* 1903 [2] 106, 553; *B.* 36, 1059 *C.* 1903 [1] 1120).  
 $\text{CH}_3\text{J}_3\text{Sn}$  1) Methylzinnjodid. Sm. 82—84° (86,5°) (*C.* 1903 [2] 106, 552; *B.* 36, 1058 *C.* 1903 [1] 1120).  
 $\text{CH}_4\text{ON}_2$  \*1) Harnstoff (*M.* 24, 218 *C.* 1903 [2] 57; *J. pr.* [2] 67, 274 *C.* 1903 [1] 1218; *B.* 36, 1926 *C.* 1903 [2] 193; *B.* 36, 3025 *C.* 1903 [2] 957; *Soc.* 83, 1391 *C.* 1904 [1] 160, 437; *B.* 37, 2293 *C.* 1904 [2] 186).  
 $\text{CH}_4\text{O}_2\text{N}_2$  \*4) Dinitromethylsäure (Nitrosomethylhydroxylamin).  $\text{Cu} + \frac{1}{2}\text{H}_2\text{O}$  (*A.* 329, 193 *C.* 1903 [2] 1414).  
 $\text{CH}_4\text{O}_2\text{Sn}$  \*1) Zinnmethylsäure (Methylstannonsäure). (*C.* 1903 [2] 553; *B.* 36, 1060 *C.* 1903 [1] 1120).  
 $\text{CH}_4\text{N}_2\text{S}$  \*1) Thioharnstoff.  $4 + \text{Ammoniumthiocyanat}$  (*Soc.* 83, 1 *C.* 1903 [1] 77, 447; *Z. a. Ch.* 34, 62 *C.* 1903 [1] 699; *B.* 36, 1151 *C.* 1903 [1] 1177; *B.* 36, 1928 *C.* 1903 [2] 193; *B.* 37, 242 *C.* 1904 [1] 651).  
 $\text{CH}_5\text{O}_2\text{As}$  \*1) Arsenmethylsäure (*C.* 1903 [1] 280; *C. r.* 139, 212 *C.* 1904 [2] 640).  
 $\text{CO}_4\text{N}_2\text{Br}_2$  \*1) Dibromdinitromethan (*B.* 35, 4291 *C.* 1903 [1] 279).

## — 1 IV —

- $\text{CHO}_4\text{N}_2\text{Br}$  \*1) Bromdinitromethan. *K.* (*B.* 35, 4292 *C.* 1903 [1] 279).

## — 1 V —

- $\text{CH}_4\text{ONCl}_2\text{P}$  1) Methylmonamid d. Phosphorsäuredichlorid. Sd. 132°<sub>27</sub> (*A.* 326, 172 *C.* 1903 [1] 819).  
 $\text{CH}_4\text{NCl}_2\text{SP}$  1) Methylmonamid d. Thiophosphorsäuredichlorid. Sd. 115°<sub>33</sub> (*A.* 326, 201 *C.* 1903 [1] 821).

**C<sub>2</sub>-Gruppe.**

- $\text{C}_2\text{H}_2$  \*1) Aethin. *Na.* (*C.* 1904 [2] 1024).  
 $\text{C}_2\text{Cl}_4$  \*1) Tetrachloräthan (*G.* 34 [1] 249 *C.* 1904 [1] 1481).  
 $\text{C}_2\text{Cl}_6$  \*1) Hexachloräthan (*C.* 1903 [2] 1052).  
 $\text{C}_2\text{Br}_2$  1) Dibromäthin. Sd. 76—77° (*C. r.* 136, 1333 *C.* 1903 [2] 102; *C. r.* 137, 55 *C.* 1903 [2] 551).  
 $\text{C}_2\text{Br}_4$  \*1) Tetrabromäthan. Sm. 55—56° (*C. r.* 136, 1334 *C.* 1903 [2] 102).  
 $\text{C}_2\text{Br}_6$  \*1) Hexabromäthan (*C.* 1903 [2] 1053).  
 $\text{C}_2\text{J}_2$  \*1) Dijodäthin (*B.* 37, 3453 *C.* 1904 [2] 1281).  
 $\text{C}_2\text{Cs}_2$  1) Kohlenstoffcäsium (*C. r.* 136, 1220 *C.* 1903 [2] 105).  
 $\text{C}_2\text{Rb}_2$  1) Kohlenstoffrubidium (*C. r.* 136, 1221 *C.* 1903 [2] 105).

## — 2 II —

- $\text{C}_2\text{HCl}_5$  \*1) Pentachloräthan (*G.* 34 [1] 249 *C.* 1904 [1] 1481).  
 $\text{C}_2\text{HBr}_5$  \*1) Pentabromäthan (*C.* 1904 [1] 715).  
 $\text{C}_2\text{H}_2\text{O}_4$  \*1) Oxalsäure. ( $\text{NH}_4$ ,  $\text{HF}$ ), ( $\text{K}$ ,  $\text{HF}$ ), ( $\text{Rb}$ ,  $\text{HF}$ ) (*A.* 328, 151 *C.* 1903 [2] 987; *H.* 37, 225 *C.* 1903 [1] 593; *C.* 1903 [2] 657, 658, 1240, 1241; 1904 [1] 81, 359, 505).  
 $\text{C}_2\text{H}_2\text{O}_6$  \*1) Perkohlsäure. *K.* (*C.* 1904 [2] 13).  
 $\text{C}_2\text{H}_3\text{Cl}_4$  \*2)  $\alpha\beta\beta$ -Tetrachloräthan (*D.R.P.* 154657 *C.* 1904 [2] 1177).  
 $\text{C}_2\text{H}_3\text{N}$  \*1) Nitril der Essigsäure (*B.* 35, 4298 *C.* 1903 [1] 280).  
 $\text{C}_2\text{H}_4\text{O}$  \*2) Äthylenoxyd (*B.* 36, 2017 *C.* 1903 [2] 338; *A.* 335, 200 *C.* 1904 [2] 1201).  
 \*4) Aldehyd d. Essigsäure (*Ph. Ch.* 43, 131 *C.* 1903 [1] 1078).  
 $\text{C}_2\text{H}_4\text{O}_2$  \*1) Essigsäure.  $\text{NH}_4 + 4\text{AlCl}_3$  (*M.* 23, 1040 *C.* 1903 [1] 386; *Soc.* 85, 1108 *C.* 1904 [2] 976).

- $C_2H_4O_2$  \*2) Aldehyd d. Oxyessigsäure (*H.* 38, 148 *C.* 1903 [1] 1426).  
 \*3) Diformaldehyd (*C.* 1904 [2] 586).  
 $C_2H_4O_4$  \*1) Glyoxylsäure. Salze siehe (*B.* 37, 3189 *C.* 1904 [2] 1108; *Soc.* 85, 1382 *C.* 1904 [2] 1705).  
 $C_2H_4N_2$  \*3) Nitril d. Amidoessigsäure.  $H_2SO_4$ , Pikrat (*B.* 36, 1511 *C.* 1903 [1] 1303; *Bl.* [3] 29, 1197 *C.* 1904 [1] 353).  
 $C_2H_4N_4$  \*1) Dicyandiamid (*C.* 1903 [2] 225).  
 $C_2H_4Cl_2$  \*1)  $\alpha\alpha$ -Dichloräthan (*B.* 37, 2398 *C.* 1904 [2] 301).  
 \*2)  $\alpha\beta$ -Dichloräthan (*B.* 37, 2398 *C.* 1904 [2] 301).  
 $C_2H_4Br_2$  \*2)  $\alpha\beta$ -Dibromäthan (*G.* 33 [1] 77 *C.* 1903 [1] 1109).  
 $C_2H_5N$  \*1) Amidoäthen (*C.* 1903 [2] 1165; *A.* 330, 280 *C.* 1904 [1] 999).  
 $C_2H_5As$  1) Arsenäthyl (*C. r.* 138, 1707 *C.* 1904 [2] 416).  
 $C_2H_6O$  \*2) Dimethyläther. Sm.  $-117,6^\circ$ . +  $5HCl$  (*C.* 1904 [1] 1195; *Soc.* 85, 927 *C.* 1904 [2] 585).  
 $C_2H_6O_2$  \*1)  $\alpha\beta$ -Dioxyäthan (*A.* 335, 200 *C.* 1904 [2] 1201).  
 $C_2H_6S$  \*1) Merkaptoäthan (*G.* 33 [1] 77 *C.* 1903 [1] 1109).  
 \*2) Dimethylsulfid (*G.* 33 [1] 77 *C.* 1903 [1] 1109).  
 $C_2H_7N$  \*1) Aethylamin (*B.* 36, 3945 *C.* 1904 [1] 352).  
 \*2) Dimethylamin. ( $HCl + 3HgCl_2 + H_2O$ ) (*J. pr.* [2] 66, 467 *C.* 1903 [1] 561).  
 $C_2H_8N_2$  \*1)  $\alpha\beta$ -Diamidoäthan.  $4 + CdJ_2$ ,  $3 + 2CdJ_2$ ,  $2 + CdJ_2$  (*C. r.* 136, 688 *C.* 1903 [1] 919; *B.* 36, 3331 *C.* 1904 [1] 19; D.R.P. 147943 *C.* 1904 [1] 133).  
 $C_2O_3Hg_3$  1) Verbindung +  $2\frac{1}{2}H_2O$  (aus d. Verb.  $C_6H_6O_6Hg_3$ ). Explodiert bei  $200^\circ$  (*B.* 36, 3708 *C.* 1903 [2] 1240).  
 $C_2N_2S$  2) Cyansenfö. Sd.  $220^\circ$  (*A.* 331, 289 *C.* 1904 [2] 31).  
 $C_2Cl_4Br_2$  \*1)  $\alpha\alpha\alpha\beta$ -Tetrachlor- $\beta\beta$ -Dibromäthan (*C.* 1903 [2] 1053).  
 \*2)  $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Dibromäthan (*C.* 1903 [2] 1053).  
 $C_2Cl_4F_2$  1)  $\alpha\beta\beta\beta$ -Tetrachlor- $\alpha\alpha$ -Difluoräthan. Sm.  $52^\circ$ ; Sd.  $91^\circ$  (*C.* 1903 [1] 13).  
 $C_2Br_2J_2$  2)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Dijodäthen. Sm.  $95-96^\circ$  (*C. r.* 136, 1334 *C.* 1903 [2] 102).

## — 2 III —

- $C_2HOCl_3$  \*5) Chloralhydrat (*Soc.* 85 1376 *C.* 1904 [2] 1597).  
 7) polym. Chloral (D.R.P. 139392 *C.* 1903 [1] 743).  
 $C_2HO_2Cl_3$  \*1) Trichloressigsäure. Pyridinsalz, Chinolinsalz (*A.* 326, 313 *C.* 1903 [1] 1088; *C.* 1903 [2] 1238; 1904 [1] 1642, 1643).  
 $C_2HO_2Br_3$  \*1) Tribromessigsäure. Derivate siehe (*C.* 1903 [2] 1238; 1904 [1] 1642).  
 $C_2HCl_3F$  1)  $\beta\beta$ -Dichlor- $\alpha$ -Fluoräthen. Sd.  $37,5^\circ$  (*C.* 1903 [1] 13).  
 $C_2HCl_2F_2$  1) Dichlortrifluoräthan. Sd.  $25-30^\circ$  (*C.* 1903 [1] 13).  
 $C_2HClF_3$  1) Trichlordifluoräthan. Sd.  $70-72^\circ$  (*C.* 1903 [1] 13).  
 $C_2HCl_2F$  1)  $\alpha\beta\beta\beta$ -Tetrachlor- $\alpha$ -Fluoräthan. Sd.  $116,5^\circ$  (*C.* 1903 [1] 13).  
 $C_2HBrMg$  1) Acetylenmagnesiumbromid (*C.* 1904 [2] 943).  
 $C_2H_2O_4N_2$  \*5) polym. Nitril d. Nitroessigsäure. Sm.  $216^\circ$  (*C.* 1904 [2] 1537).  
 $C_2H_2O_4Cl_2$  \*1) Dichloressigsäure. Pyridinsalz, Chinolinsalz, Strychninsalz (*A.* 326, 319 *C.* 1903 [1] 1088).  
 $C_2H_2O_2F_2$  \*1) Difluoressigsäure. Sd.  $134,2^\circ_{760}$ . Na, Ca, Ba, Pb, Hg, Ag (*C.* 1903 [2] 709).  
 $C_2H_2O_2S_2$  1) Dithioloxalsäure.  $Na_2$  (*C. r.* 136, 555 *C.* 1903 [1] 816).  
 $C_2H_2O_2N_4$  \*1)  $\alpha\alpha\beta\beta$ -Tetranitroäthan.  $K_2$  (*B.* 35, 4288 *C.* 1903 [1] 279).  
 $C_2H_2N_2S$  2) 1,2,3-Thiodiazol. Sd.  $157^\circ_{742}$ .  $HCl$ . ( $HCl$ ,  $AuCl_3$ ), +  $AuCl_3$  (*A.* 333, 19 *C.* 1904 [2] 781).  
 $C_2H_2N_2S_2$  \*1)  $\alpha$ -Cyanimido- $\alpha\alpha$ -Dimerkaptomethan (Dithiocyansäure).  $K_2$  (*A.* 331, 283 *C.* 1904 [2] 31).  
 $C_2H_2N_2S_3$  \*3) Isopersulfocyansäure (*A.* 331, 290 *C.* 1904 [2] 31).  
 4) 5-Imido-3-Thiocarbonyl-4,5-Dihydro-1,2,4-Dithioazol (Xanthanwasserstoff) (*A.* 331, 294 *C.* 1904 [2] 32).  
 $C_2H_2ClF$  1)  $\beta$ -Chlor- $\alpha$ -Fluoräthen. Sd.  $10-11^\circ$  (*C.* 1903 [1] 13).  
 $C_2H_2ClF_2$  1)  $\alpha$ -Chlor- $\alpha\beta\beta$ -Trifluoräthan. Sd.  $17^\circ$  (*C.* 1903 [1] 13).  
 $C_2H_2Cl_2F_2$  1)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Difluoräthan. Sd.  $60^\circ$  (*C.* 1903 [1] 13).  
 $C_2H_2Cl_3F$  1)  $\alpha\beta\beta$ -Trichlor- $\alpha$ -Fluoräthan. Sd.  $103^\circ$  (*C.* 1903 [1] 13).  
 $C_2H_2OCl$  \*5) Chlorid d. Essigsäure (D.R.P. 151864 *C.* 1904 [2] 69).  
 $C_2H_2O_3N_2$  \*1) Urazol. Sm.  $243^\circ$  (*B.* 36, 745 *C.* 1903 [1] 827).

- $C_2H_3O_5N$  \*1) Oximidoessigsäure. Sm. 143—144° u. Zers. (*Bl.* [3] 31, 677 *C.* 1904 [2] 195).  
 \*2) Oxaminsäure. Sm. 210°.  $NH_4$ , Ag, Methylaminsalz (*Soc.* 83, 22 *C.* 1903 [1] 448; *B.* 37, 2930 *C.* 1904 [2] 1241).  
 3) Gem. Anhydrid d. Salpetrigensäure u. Essigsäure (Nitrosoacetanhydrid). *Fl.* (*C.* 1903 [2] 656; *G.* 34 [1] 439 *C.* 1904 [2] 511).  
 $C_2H_3O_5N$  C 19,8 — H 2,5 — O 66,1 — N 11,6 — M. G. 121.  
 1) Nitrat d. Oxyessigsäure. Sm. 54,5° (*Bl.* [3] 29, 602 *C.* 1903 [2] 342).  
 $C_2H_3NCl_2$  1)  $\alpha\beta$ -Dichlor- $\alpha$ -Imidoäthan (*J. pr.* [2] 69, 352 *C.* 1904 [2] 510).  
 $C_2H_3ClF_2$  1)  $\beta$ -Chlor- $\alpha\alpha$ -Difluoräthan. Sd. 36° (*C.* 1903 [1] 438).  
 $C_2H_4OCl_2$  \*2) s-Dichlormethyläther (*A.* 330, 112 *C.* 1904 [1] 1063; *C. r.* 138, 1110 *C.* 1904 [1] 1642; *A.* 334, 15 *C.* 1904 [2] 947).  
 $C_2H_4OF_2$  1)  $\beta\beta$ -Difluor- $\alpha$ -Oxyäthan. Sm. —28,2°; Sd. 95,5—96°. Na (*C.* 1903 [1] 436; 1903 [2] 486).  
 $C_2H_4O_2N_2$  \*1)  $\alpha\beta$ -Dioximidoäthan. Sm. 178,5° (*B.* 36, 3831 *C.* 1904 [1] 19).  
 $C_2H_4O_2Cl_2$  \*1)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dioxyäthan. Sm. 55—56°; Sd. 96—97,5° (*G.* 33 [2] 395 *C.* 1904 [1] 921).  
 $C_2H_4O_2S$  \*1) Merkaptoessigsäure. Salze (*Z. a. Ch.* 41, 235 *C.* 1904 [2] 1107).  
 $C_2H_4O_3N_2$  \*1) Aethylnitrolsäure. Sm. 87—88° u. Zers. (*G.* 33 [1] 510 *C.* 1903 [2] 937).  
 \*5) Methazonsäure. Ag. (*M.* 25, 719 *C.* 1904 [2] 1110).  
 \*11) Hydroxyloxamid (*A.* 326, 259 *C.* 1903 [1] 736).  
 12) Amid d. Nitroessigsäure. Zers. bei 97—98°.  $NH_4$ , Ag (*M.* 25, 708 *C.* 1904 [2] 1110).  
 13) Amid. d. Oximidoxyessigsäure. Ag (*Soc.* 81, 1565 *C.* 1903 [1] 157).  
 $C_2H_4O_5Cr$  1) Gem. Anhydrid d. Essigsäure u. Chromsäure. (Acetylchromsäure (*B.* 34, 2216 *C.* 1903 [2] 419).  
 $C_2H_4N_2S_3$  2) Dimerkaptomethylenthioharnstoff?  $K_2$  (*A.* 331, 288 *C.* 1904 [2] 31).  
 $C_2H_5ON$  \*1) Acetaldoxim (*B.* 35, 4298 *C.* 1903 [1] 280).  
 \*3) Aldehyd d. Amidoessigsäure. ( $2HCl$ ,  $PtCl_4$ ) (*B.* 37, 613 *C.* 1904 [1] 924).  
 \*4) Amid. d. Essigsäure.  $HBr$ ,  $HJ$  (*B.* 36, 154 *C.* 1903 [1] 444).  
 $C_2H_5OCl$  \*3) Chlordimethyläther. Sd. 60° (*B.* 36, 1384 *C.* 1903 [1] 1295; *A.* 334, 49 *C.* 1904 [2] 948).  
 $C_2H_5O_2N$  \*1) Nitroäthan (*B.* 35, 4297 *C.* 1903 [1] 280).  
 \*3) Acethydroxamsäure (*B.* 35, 4295 *C.* 1903 [1] 280; *B.* 36, 817 *C.* 1903 [1] 1017).  
 \*6) Amidoessigsäure (*D.R.P.* 141976 *C.* 1903 [1] 1381; *H.* 39, 404 *C.* 1903 [2] 961).  
 \*7) Methylester d. Amidoameisensäure. Sm. 57—58° (*B.* 36, 2475 *C.* 1903 [2] 559).  
 \*8) Amid d. Oxyessigsäure. Sm. 120° (*B.* 37, 2636 Anm. *C.* 1904 [2] 518).  
 $C_2H_5O_2N_3$  \*2) Biuret.  $2 + CdCl_2$  (*H.* 43, 72 *C.* 1904 [2] 1610).  
 $C_2H_5O_3N$  6)  $\beta$ -Oximido- $\alpha\beta$ -Dioxyäthan (Glykolhydroxamsäure). Cu (*G.* 34 [2] 73 *C.* 1904 [2] 734).  
 $C_2H_5O_4P$  2) Aethylenester d. Phosphorsäure (*C. r.* 138, 375 *C.* 1904 [1] 786).  
 $C_2H_5NF_2$  1)  $\beta\beta$ -Difluor- $\alpha$ -Amidoäthan. Sd. 67,5—67,8°<sub>757</sub>.  $HCl$ , ( $2HCl$ ,  $PtCl_4$ ),  $H_2SO_4$ , Oxalat (*C.* 1904 [2] 944).  
 $C_2H_5NS_2$  \*1) Methylester d. Amidodithioameisensäure. Sm. 40—42° (*C. r.* 135, 975 *C.* 1903 [1] 139).  
 $C_2H_5Cl_3Si$  \*1) Siliciumäthyltrichlorid (*C.* 1904 [1] 636).  
 $C_2H_5JZn$  \*1) Zinkäthyljodid (*C.* 1903 [2] 339).  
 $C_2H_5J_3As$  1) Antimonäthyljodid. Sm. 43° (*C. r.* 139, 599 *C.* 1904 [2] 1451).  
 $C_2H_5ON_2$  \*5) Amid d. Amidoessigsäure (*A.* 327, 368 *C.* 1903 [2] 660).  
 \*6) Hydrazid d. Essigsäure. Sd. 129°<sub>13</sub> (*J. pr.* [2] 69, 145 *C.* 1904 [1] 1274).  
 $C_2H_6OSn$  \*1) Zinndimethyloxyd (*C.* 1903 [2] 553; *B.* 36, 3030 *C.* 1903 [2] 938).  
 $C_2H_6O_2N_4$  \*2) Amid d. Hydrazodicarbonsäure. Sm. 257° (246°) (*B.* 35, 4215 *C.* 1903 [1] 161; *G.* 33 [1] 322 *C.* 1903 [2] 281; *B.* 36, 4379 *C.* 1904 [1] 454).  
 \*4) Dihydrazid d. Oxalsäure. Sm. 241° u. Zers. (*B.* 37, 2202 *C.* 1904 [2] 323).  
 $C_2H_6O_2S$  \*1) Aethansulfinsäure.  $Mg + 2H_2O$  (*B.* 37, 2153 *C.* 1904 [2] 186).  
 \*2) Dimethylsulfon. Sm. 110° (*B.* 37, 3550 *C.* 1904 [2] 1377).

- $C_2H_5O_3S$  \*1) Aethansulfonsäure. Aethylaminsalz (*B.* 37, 3803 *C.* 1904 [2] 1564).  
 $C_2H_5O_3S$  \*2) Dimethylester d. Schwefelsäure (*A.* 327, 105 *C.* 1903 [1] 1213).  
 $C_2H_5O_3S_2$  \*1) Aethan- $\alpha\alpha$ -Disulfonsäure.  $(NH_4)_2$  (*B.* 37, 3808 *C.* 1904 [2] 1564).  
 $C_2H_5NBr$  \*2) Aethan- $\alpha\beta$ -Disulfonsäure.  $(NH_4)_2$  (*B.* 37, 3806 *C.* 1904 [2] 1564).  
 $C_2H_5N_2S$  2) Dimethylbromamin. Sd. 64—66° (*B.* 37, 1783 *C.* 1904 [1] 1483).  
 $C_2H_5N_2S$  2) Methyläther d. Amidoimidomerkaptomethan (Methylpseudothioharnstoff). HCl, HJ, Chloracetat (*Soz.* 83, 567 *C.* 1903 [1] 1123; *Am.* 29, 482, 492 *C.* 1903 [1] 1309).  
 $C_2H_5ClTl$  1) Thalliumdimethylchlorid. Zers. oberh. 280° (*B.* 37, 2057 *C.* 1904 [2] 20).  
 $C_2H_5BrTl$  1) Thalliumdimethylbromid. Zers. oberh. 275° (*B.* 37, 2055 *C.* 1904 [2] 20).  
 $C_2H_5Br_3Sn$  \*1) Zinndimethylbromid. Sm. 74° (*B.* 36, 1058 *C.* 1903 [1] 1120).  
 $C_2H_5JTl$  1) Thalliumdimethyljodid. Zers. bei 264—266° (*B.* 37, 2056 *C.* 1904 [2] 20).  
 $C_2H_5J_2Sn$  \*1) Zinndimethyljodid. Sm. 32° (*B.* 36, 1058 *C.* 1903 [1] 1120).  
 $C_2H_5S_3Sn_2$  1) Methylzinn sulfid (*B.* 36, 3029 *C.* 1903 [2] 938).  
 $C_2H_7ON_3$  2) Hydrazid d. Amidoessigsäure. Sm. 80—85°. HCl (*J. pr.* [2] 70, 102 *C.* 1904 [2] 1035).  
 $C_2H_7O_2N_2$  C 18,0 — H 5,3 — O 24,1 — N 52,6 — M. G. 133.  
 $C_2H_7O_2N_2$  1) Dihydrazid d. Imidodiameisensäure. Sm. 199—200° u. Zers. (*B.* 36, 744 *C.* 1903 [1] 827).  
 $C_2H_7O_2As$  \*1) Kakodylsäure (*B.* 36, 3325 *C.* 1903 [2] 1165; *B.* 37, 153 *C.* 1904 [1] 578; *B.* 37, 1076 *C.* 1904 [1] 1327; *B.* 37, 2289 *C.* 1904 [2] 186; *B.* 37, 2705 *C.* 1904 [2] 416; *B.* 37, 3625 *C.* 1904 [2] 1451).  
 $C_2H_7O_4P$  \*1) Aethylphosphorsäure (*C. r.* 138, 762 *C.* 1904 [1] 1196).  
 $C_2H_7O_4P$  \*3)  $\alpha$ -Oxyäthylphosphinsäure (*C. r.* 136, 48 *C.* 1903 [1] 439).  
 $C_2H_7O_4P$  1) Mono[ $\beta$ -Oxyäthylester] d. Phosphorsäure. Ba +  $H_2O$ , Chininsalz (*C. r.* 138, 375 *C.* 1904 [1] 786).  
 $C_2H_7STl$  1) Thalliumdimethylsulfhydrat (*B.* 37, 2056 *C.* 1904 [2] 20).  
 $C_2H_3O_5As$  1) Dimethylpyroarsinsäure.  $Na_3$  (*C. r.* 139, 411 *C.* 1904 [2] 764).  
 $C_2H_3O_6P_2$  2) Verbindung (aus d. Verb.  $C_4H_{10}O_6P_2$ ) (*C. r.* 136, 757 *C.* 1903 [1] 1017).  
 $C_2H_3O_6P_2$  1) Säure (aus Chlorophyllpflanzen). ( $Na_4$ ,  $Ca_3$  +  $8H_2O$ ) (*C. r.* 137, 338 *C.* 1903 [2] 728; *C. r.* 137, 439 *C.* 1903 [2] 797; *H.* 40, 121 *C.* 1904 [1] 191; *Am.* 31, 569 *C.* 1904 [2] 47).

## — 2 IV —

- $C_2HOClF_2$  1) Chlorid d. Difluoressigsäure. Sd. 25° (*C.* 1903 [2] 710).  
 $C_2HOCl_2F$  1) Fluorid d. Dichloressigsäure. Sd. 70,5° (*C.* 1903 [1] 13).  
 $C_2HOBr_2F$  \*1) Bromid d. Bromfluoressigsäure. Sd. 112,5° (*C.* 1903 [1] 12).  
 $C_2HO_2Cl_3P$  1) Verbindung (aus Chloral u. Phosphorpentachlorid). Sd. 238—242° (*G.* 34 [1] 250 *C.* 1904 [1] 1481).  
 $C_2HO_2BrF_2$  1) Bromdifluoressigsäure? Sm. 40°; Sd. 145—160° (*C.* 1903 [2] 710).  
 $C_2HCl_2Br_2F$  1)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dibrom- $\alpha$ -Fluoräthan. Sd. 163,5° (*C.* 1903 [1] 13).  
 $C_2H_2O_2BrF$  1) Bromfluoressigsäure. Sm. 49°; Sd. 183°.  $NH_4$ , Na, K, Pb, Zn (*C.* 1903 [1] 12).  
 $C_2H_2O_2JF$  1) Jodfluoressigsäure. Sm. 74° (*C.* 1903 [1] 13).  
 $C_2H_2O_3N_2Br_2$  1) Amid d. Dibromnitroessigsäure (*M.* 25, 723 *C.* 1904 [2] 1110).  
 $C_2H_3ONCl_2$  3) Chloramid d. Chloressigsäure. Sm. 68—69° (*G.* 33 [1] 231 *C.* 1903 [2] 24).  
 $C_2H_3ONJ_2$  \*1) Amid d. Dijodessigsäure. Sm. 201—202° u. Zers. (*B.* 37, 1787 *C.* 1904 [1] 1484).  
 $C_2H_3ONF_2$  1) Amid d. Difluoressigsäure. Sm. 50,2° (*C.* 1903 [2] 710).  
 $C_2H_3O_2BrHg$  \*1) Quecksilberbromidessigsäure. Sm. 198° (*A.* 329, 189 *C.* 1903 [2] 1414).  
 $C_2H_3O_3NS$  2) Methylsulfonisocycansäure. Sm. 31°; Sd. 73,5—75°<sub>12</sub> (*B.* 36, 3214 *C.* 1903 [2] 1055).  
 $C_2H_3O_3N_2Br$  2) Amid d. Bromnitroessigsäure. Sm. 80—81° (79°).  $NH_4$  (*B.* 37, 1786 *C.* 1904 [1] 1483; *M.* 25, 728 *C.* 1904 [2] 1111).  
 $C_2H_3ONCl$  \*2) Amid d. Chloressigsäure. Hg (*G.* 33 [1] 229 *C.* 1903 [2] 24).  
 $C_2H_4OCl_3P$  1)  $\beta$ -Chloräthyläther d. Dichloroxyphosphin (*C. r.* 136, 756 *C.* 1903 [1] 1017).

- $C_2H_4O_2NCl$  \*3) Nitrit d.  $\beta$ -Chlor- $\alpha$ -Oxyäthan. Sd. 95—96°<sub>764</sub> (C. 1903 [1] 436).  
 4)  $\beta$ -Chlor- $\alpha$ -Oximido- $\alpha$ -Oxyäthan (Chloracethydroxamsäure). Sm. 108°  
 u. Zers. (G. 34 [1] 430 C. 1904 [2] 511).  
 $C_2H_4O_2N_2F_2$  1)  $\beta\beta$ -Difluor- $\alpha$ -Nitramidoäthan. Sm. 22,4°; Sd. 111—112°<sub>19</sub>.  $NH_4$ , Na  
 (C. 1904 [2] 945).  
 $C_2H_5O_2Cl_2P$  2)  $\beta$ -Chloräthyläther d. Chlordioxyphosphin (C. r. 136, 757 C. 1903  
 [1] 1017).  
 $C_2H_5O_3ClS$  \*4) Chlorid d. Aethylschwefelsäure. Sd. 58°<sub>20</sub> (Am. 30, 213 C. 1903  
 [2] 936).  
 $C_2H_5O_3ClP$  1)  $\beta$ -Chloräthyläther d. Trioxyphosphin (C. r. 136, 757 C. 1903 [1] 1017).  
 $C_2H_5NCl_2P$  1) Aethylamidodichlorphosphin. Sd. 222—225° (A. 326, 150 C. 1903  
 [1] 760).  
 $C_2H_5NCl_4P$  1) Dimethylamidophosphortetrachlorid. +  $PCl_5$  (A. 326, 160 C. 1903  
 [1] 761).

## — 2 V —

- $C_2HOCIBrF$  1) Chlorid d. Bromfluoreessigsäure. Sd. 98°<sub>765</sub> (C. 1903 [1] 12).  
 $C_2H_3ONClBr$  2) Bromamid d. Chloressigsäure. Sm. 61—63° (G. 33 [1] 229 C. 1903  
 [2] 24).  
 $C_2H_3ONClJ$  1) Amid d. Chlorjodessigsäure. Sm. 140—141° (B. 37, 1786 C. 1904  
 [1] 1484).  
 $C_2H_3ONBrF$  1) Amid d. Bromfluoreessigsäure. Sm. 44° (C. 1903 [1] 12).  
 $C_2H_3ONJF$  1) Amid d. Jodfluoreessigsäure. Sm. 92,5° (C. 1903 [1] 13).  
 $C_2H_5ONCl_2P$  1) Dimethylmonamid d. Phosphorsäuredichlorid. Sd. 194—195°  
 (A. 326, 179 C. 1903 [1] 819).  
 2) Aethylmonamid d. Phosphorsäuredichlorid. Sd. 140°<sub>22</sub> (A. 326,  
 172 C. 1903 [1] 819).  
 $C_2H_5NCl_2SP$  1) Dimethylmonamid d. Thiophosphorsäuredichlorid. Sd. 85 bis  
 90°<sub>18</sub> (A. 326, 210 C. 1903 [1] 822).  
 2) Aethylmonamid d. Thiophosphorsäuredichlorid. Sd. 216° (A.  
 326, 202 C. 1903 [1] 821).

**C<sub>3</sub>-Gruppe.**

- $C_3H_6$  \*1) Propylen (B. 36, 1997 C. 1903 [2] 335).  
 \*2) R-Trimethylen (B. 36, 2014 C. 1903 [2] 337).

## — 3 II —

- $C_3H_2O$  \*1) Aldehyd d. Aethincarbonsäure (B. 36, 3664 C. 1903 [2] 1312).  
 $C_3H_4O_3$  \*3) Brenztraubensäure. Ba, Pb, ( $NH_4 + NH_4 \cdot HSO_3$ ), ( $NH_4 \cdot HSO_3$ ) (R.  
 21, 299 C. 1903 [1] 17; H. 42, 121 C. 1904 [2] 664).  
 11) Methylester d. Glyoxylsäure. Sm. 53° (B. 37, 3592 C. 1904 [2] 1378).  
 $C_3H_4O_4$  \*1) Malonsäure (C. 1903 [2] 712; C. r. 135, 1351 C. 1903 [1] 320; C.  
 1904 [1] 505).  
 $C_3H_4N_2$  \*2) Imidazol. Benzoat (B. 37, 3115 C. 1904 [2] 1316).  
 \*3) Nitril d. Methylenamidoessigsäure. Sm. 129° (B. 36, 1507 C. 1903  
 [1] 1302).  
 \*4) isom. Nitril d. Methylenamidoessigsäure. Sm. 86° (B. 36, 1508  
 C. 1903 [1] 1302).  
 $C_3H_5N$  \*3) Nitril d. Propionsäure (G. 33 [1] 77 C. 1903 [1] 1109).  
 $C_3H_5N_3$  \*3) 4-Amidopyrazol. Sm. 80—82°. 2HCl, 2HNO<sub>3</sub>, 2 Pikrat, Pikrolonat  
 (B. 37, 3520 C. 1904 [2] 1313).  
 5) 3- oder 5-Amidopyrazol. Sd. 282°<sub>763</sub> (B. 37, 3522 C. 1904 [2] 1314).  
 $C_3H_6O$  \*3)  $\alpha\beta$ -Propylenoxyd (B. 36, 2017 C. 1903 [2] 338; A. 335, 201 C. 1904  
 [2] 1201).  
 \*7) Aceton. 2 + 5HCl, + HBr, 2 + HJ (Soc. 85, 924 C. 1904 [2] 585).  
 11) Porinin. = ( $C_3H_6O$ )<sub>x</sub>. Sm. 70—71° (J. pr. [2] 68, 63 C. 1903 [2] 513).  
 $C_3H_6O_2$  \*2) Acetol (C. r. 135, 970 C. 1903 [1] 132; A. 335, 247 C. 1904 [2] 1283).  
 \*3) Glycid. Sd. 62°<sub>15</sub> (A. 335, 231 C. 1904 [2] 1204).  
 \*4) Propionsäure.  $NH_4$  (G. 33 [1] 77 C. 1903 [1] 1109; M. 23, 1053  
 C. 1903 [1] 386).  
 \*6) Methylester d. Essigsäure (B. 37, 3659 C. 1904 [2] 1452).

- $C_3H_6O_2$  7) Aldehyd d.  $\beta$ -Oxypropionsäure. *Sd.*  $90^\circ_{18}$  (*A.* 335, 219 *C.* 1904 [2] 1203).
- $C_3H_6O_3$  \*1) Dioxyceton (*C.* 1904 [2] 1291).  
 \*2) Trioxymethylen (*Bl.* [3] 27, 1212 *C.* 1903 [1] 224; *Bl.* [3] 29, 87 *C.* 1903 [1] 501).  
 \*4) i-Milchsäure (*D.R.P.* 140319 *C.* 1903 [1] 1106; *Ar.* 241, 421 *C.* 1903 [2] 1027; *C. r.* 139, 204 *C.* 1904 [2] 641).  
 \*5) d-Milchsäure (*H.* 37, 203 *C.* 1903 [1] 593; *C. r.* 139, 204 *C.* 1904 [2] 641).  
 \*6) l-Milchsäure (*Soc.* 83, 259 *C.* 1903 [1] 564, 869; *C. r.* 139, 204 *C.* 1904 [2] 641).
- $C_3H_6O_4$  \*1) r- $\alpha\beta$ -Dioxypionsäure (*H.* 42, 61 *C.* 1904 [2] 608).  
 \*3) d- $\alpha\beta$ -Dioxypionsäure. *Ba.* (*B.* 37, 340 *C.* 1904 [1] 645).  
 4) l- $\alpha\beta$ -Dioxypionsäure. *Ba.* (*B.* 16, 2720; *B.* 37, 339 *C.* 1904 [1] 645). — I, 623.
- $C_3H_6N_2$  \*2) Nitril d. i- $\alpha$ -Amidopropionsäure.  $HCl$ , ( $2HCl$ ,  $PtCl_4$ ),  $H_2SO_4$ , Pikrat, Tartrat (*Bl.* [3] 29, 1197 *C.* 1904 [1] 353; *Bl.* [3] 29, 1180 *C.* 1904 [1] 353; *Bl.* [3] 29, 1190 *C.* 1904 [1] 360).  
 \*3) Nitril d. Methylamidoessigsäure.  $H_2SO_4$  (*Bl.* [3] 29, 1199 *C.* 1904 [1] 354).  
 6) Nitril d. d- $\alpha$ -Amidopropionsäure.  $H_2SO_4$ , Tartrat (*Bl.* [3] 29, 1195 *C.* 1904 [1] 361).  
 7) Nitril d. l- $\alpha$ -Amidopropionsäure.  $H_2SO_4$ , Tartrat (*Bl.* [3] 29, 1195 *C.* 1904 [1] 361).
- $C_3H_6N_4$  \*1) 3,5-Diamidopyrazol (*B.* 37, 3524 *C.* 1904 [2] 1314).  
 3) l-Amido-5-Methyl-1,2,3-Triazol. *Sm.*  $70^\circ$ .  $HCl$  (*B.* 36, 3617 *C.* 1903 [2] 1381).
- $C_3H_6S_3$  \*1) Trimethylensulfid. *Sm.*  $216^\circ$  (*C.* 1904 [2] 21).
- $C_3H_8O$  \*1)  $\alpha$ -Oxypropan. +  $5HCl$ , +  $2HBr$ , +  $2HJ$  (*C. r.* 137, 302 *C.* 1903 [2] 708; *Soc.* 85, 928 *C.* 1904 [2] 585).  
 \*2)  $\beta$ -Oxypropan (*C. r.* 137, 302 *C.* 1903 [2] 708).
- $C_3H_8O_2$  \*1)  $\alpha\beta$ -Dioxypropan (*A.* 335, 201 *C.* 1904 [2] 1201).  
 \*2)  $\alpha\gamma$ -Dioxypropan (*M.* 25, 267 *C.* 1904 [1] 1401; *A.* 335, 206 *C.* 1904 [2] 1202).
- $C_3H_8O_3$  \*1)  $\alpha\beta\gamma$ -Trioxypropan. *Na.* (*A.* 335, 209 *C.* 1904 [2] 1202; *A.* 335, 279 *C.* 1904 [2] 1284).
- $C_3H_8S$  \*3) Methyläthylsulfid (*G.* 33 [1] 77 *C.* 1903 [1] 1109).
- $C_3H_9N$  \*1)  $\alpha$ -Amidopropan. ( $2HCl$ ,  $SnCl_4$ ) (*C.* 1904 [1] 923).  
 \*2) Isopropylamin (*B.* 36, 703 *C.* 1903 [1] 818).  
 \*4) Trimethylamin. ( $HCl$  +  $6HgCl_2$  +  $H_2O$ ) (*J. pr.* [2] 66, 468 *C.* 1903 [1] 561; *A.* 334, 229 *C.* 1904 [2] 900).
- $C_3H_9P$  3) Propylphosphin. *Sd.*  $53-53,5^\circ$  (*A.* 241, 411 *C.* 1903 [2] 987).
- $C_3H_{10}N_2$  \*1)  $\alpha\beta$ -Diamidopropan. ( $2HCl$ ,  $PtCl_4$ ) (*B.* 36, 1063 *C.* 1903 [1] 1174; *J. pr.* [2] 70, 217 *C.* 1904 [2] 1460).  
 \*2)  $\alpha\gamma$ -Diamidopropan.  $2HCl$  (*B.* 36, 334 *C.* 1903 [1] 702).  
 4) Propylhydrazin.  $HCl$  (*J. pr.* [2] 70, 280 *C.* 1904 [2] 1545).

## — 3 III —

- $C_3HOBr_5$  \*1) Pentabromaceton. *Sm.*  $74^\circ$  (*R.* 22, 288 *C.* 1903 [2] 108).
- $C_3H_2OBr_4$  \*1)  $\alpha\alpha\alpha\gamma$ -Tetrabrom- $\beta$ -Ketopropan +  $4H_2O$ . *Sm.*  $62^\circ$  ( $37-38^\circ$  wasserfrei) (*R.* 22, 286 *C.* 1903 [2] 108).
- $C_3H_2O_2Cl_4$  2) Chlormethylester d. Trichloressigsäure. *Sd.*  $170^\circ$  u. Zers. (*C. r.* 136, 1566 *C.* 1903 [2] 342).
- $C_3H_2O_2N_2$  \*1) Parabansäure. *Sm.*  $242-244^\circ$  u. Zers. (*A.* 333, 115 *C.* 1904 [2] 893).
- $C_3H_3ON$  3) Isoxazol. *Sd.*  $95-95,5^\circ_{760}$ . +  $CdCl_2$ , 2 +  $PtCl_4$  (*B.* 36, 3665 *C.* 1903 [2] 1312).
- $C_3H_3O_2N$  \*7) Acetylisocyansäure. *Sd.*  $80-80,3^\circ$  (*B.* 36, 3216 *C.* 1903 [2] 1055).
- 8) Nitril d. Formoxylessigsäure. *Sd.*  $172-173^\circ_{759}$  (*C.* 1904 [2] 1377).
- $C_3H_3O_3N_2$  1) Verbindung (aus Nitromalonsäureamid) =  $(C_3H_3O_3N_2)_x$ . *Ag.* (*M.* 25, 121 *C.* 1904 [1] 1553).
- $C_3H_3O_3N_3$  \*5) Fulminursäure. *Sm.*  $136-149^\circ$  (*Am.* 29, 262 *C.* 1903 [1] 957).
- 13) Nitril d.  $\alpha$ -Nitro- $\beta$ -Oximidopropionsäure. *Sm.*  $143-144^\circ$  (*Am.* 29, 266 *C.* 1903 [1] 958).

- $C_3H_3O_4N_3$  \*1) 1-Nitro-2,4-Diketotetrahydroimidazol. Sm. 170° (A. 327, 373 C. 1903 [2] 660).
- $C_3H_3N_2J$  \*1) 4-Jodpyrazol. Sm. 108,5° (B. 37, 3522 C. 1904 [2] 1314).
- $C_3H_4ON_2$  \*5) Amid d. Cyanessigsäure. Sm. 123–124° (C. 1903 [2] 192).
- \*8) 4-Oxypyrazol. HCl (A. 335, 109 C. 1904 [2] 1232).
- 10) Verbindung (aus Epinephrin). (HCl, JCl), (HCl, AuCl<sub>3</sub>) (B. 37, 370 C. 1904 [1] 677).
- $C_3H_4OCl_2$  \*4)  $\alpha\gamma$ -Dichlor- $\beta$ -Ketopropan. Sm. 42,5°; Sd. 172° (C. 1904 [1] 576).
- $C_3H_4OCl_4$  2) Chlormethyläther d.  $\alpha\beta\beta$ -Trichlor- $\alpha$ -Oxyäthan. Sd. 174–176° (A. 330, 129 C. 1904 [1] 1064).
- $C_3H_4O_2N_2$  \*2) Hydantoin. Sm. 217–220°. Na, K (Am. 28, 390 C. 1903 [1] 90; A. 327, 355, 369 C. 1903 [2] 660; A. 333, 109 C. 1904 [2] 893).
- $C_3H_4O_2Cl_2$  9) Chlormethylester d. Chloressigsäure. Sd. 155–160° (C. r. 136, 1565 C. 1903 [2] 342).
- $C_3H_4O_2Br_2$  6) isom. Dibrompropionsäure? Sm. 61°. (C. 1904 [2] 665).
- $C_3H_4O_2S_2$  1) Dithiolmalonsäure. Na<sub>2</sub> (C. r. 136, 556 C. 1903 [1] 816).
- $C_3H_4O_4N_2$  \*3) Oxalursäure (H. 37, 225 C. 1903 [1] 593).
- 6) Verbindung (aus d. Amid d. Nitromalonsäure). Zers. bei 140–141° Ag, Ag<sub>2</sub> (M. 25, 84 C. 1904 [1] 1552).
- 7) isom. Verbindung (aus d. Amid d. Nitromalonsäure). Zers. bei 142–143°. Ag + H<sub>2</sub>O (M. 25, 85 C. 1904 [1] 1552).
- C 18,4 — H 2,0 — O 65,3 — N 14,3 — M. G. 196.
- $C_3H_4O_3N_2$  1) Dinirrat d.  $\alpha\beta$ -Dioxypropionsäure. Zers. bei 117° (C. r. 137, 573 C. 1903 [2] 1111).
- $C_3H_4N_2S$  3) 5-Methyl-1,2,3-Thiodiazol. Sd. 91°<sub>88</sub> (184°<sub>755</sub>). + AuCl<sub>3</sub> (A. 325, 177 C. 1903 [1] 646; A. 333, 15 C. 1904 [2] 781).
- $C_3H_5ON_3$  6) Nitril d. Ureidoessigsäure. Sm. 139° (Am. 28, 391 C. 1903 [1] 90).
- $C_3H_5OCl_3$  \*1)  $\alpha\alpha\alpha$ -Trichlor- $\beta$ -Oxypropan. Sm. 50–51°; Sd. 161,8°<sub>773</sub> (C. r. 138, 205 C. 1904 [1] 636; D.R.P. 151545 C. 1904 [1] 1586).
- 2) Chlormethyläther d.  $\alpha\beta$ -Dichlor- $\alpha$ -Oxyäthan. Sd. 144–148° (A. 330, 128 C. 1904 [1] 1064).
- $C_3H_5OBr$  \*5) Aldehyd d.  $\beta$ -Brompropionsäure. Sd. 40–45°<sub>18</sub> (A. 335, 263 C. 1904 [2] 1283).
- 7) Aldehyd d.  $r$ - $\alpha$ -Brompropionsäure. Sd. 42–44°<sub>88</sub> (A. 335, 264 C. 1904 [2] 1283).
- $C_3H_5OJ$  6) Aldehyd d.  $r$ - $\alpha$ -Jodpropionsäure. Sd. 40°<sub>15</sub> (A. 335, 266 C. 1904 [2] 1283).
- $C_3H_5O_2N$  \*4) 2-Ketotetrahydrooxazol. Sm. 90°; Sd. 200°<sub>21</sub> (B. 36, 1281 C. 1903 [1] 1215).
- $C_3H_5O_2N_3$  4) Aethylester d. Stickstoffkohlenensäure. Fl. (P. GUTMANN, Dissert. Heidelberg 1903).
- $C_3H_5O_2Cl$  \*1)  $\alpha$ -Chlorpropionsäure. Sd. 185° (C. 1903 [2] 486).
- 9)  $\gamma$ -Chlor- $\beta$ -Keto- $\alpha$ -Oxypropan. Sm. 74°. (C. 1904 [1] 576).
- $C_3H_5O_2J$  \*1)  $\alpha$ -Jodpropionsäure. Sm. 44,5–45,5°. Mg + 4<sup>1</sup>/<sub>2</sub> H<sub>2</sub>O, Li + H<sub>2</sub>O, Ba, Cu (B. 36, 4392 C. 1904 [1] 259).
- $C_3H_5O_3N$  9) Gem. Anhydrid d. Salpetrigensäure u. Propionsäure. Sd. 60° (G. 34 [1] 442 C. 1904 [2] 511).
- 10) Methylester d. Oximidoessigsäure. Sm. 55°; Sd. 100°<sub>15</sub> (Bl. [3] 31, 678 C. 1904 [2] 195).
- $C_3H_5O_3N_3$  \*3) Amid d. Oxalursäure (B. 37, 2929 C. 1904 [2] 1241).
- \*4) Amid d. Oximidomalonsäure. Sm. 187–188° u. Zers. (175,5°) NH<sub>4</sub>, K, Cu + H<sub>2</sub>O, Ag, Ag + 2NH<sub>3</sub> (Soc. 83, 31 C. 1903 [1] 73, 441; M. 25, 67, 75 C. 1904 [1] 1552).
- 5) Semicarbazonessigsäure. Sm. 240° u. Zers. (Bl. [3] 31, 682 C. 1904 [2] 196).
- $C_3H_5O_3B$  \*1) Borsäureglycerinester (B. 36, 2222 C. 1903 [2] 420).
- $C_3H_5O_4N$  \*2) Amidomalonsäure. K (A. 333, 80 C. 1904 [2] 827).
- 6) Methylester d. Nitroessigsäure. Sd. 107°<sub>38</sub> NH<sub>4</sub>, K (A. 328, 247 C. 1903 [2] 1000; Bl. [3] 31, 853 C. 1904 [2] 641).
- 7) Nitrat d.  $\gamma$ -Oxy- $\alpha\beta$ -Propanoxyd. Sd. 62–64°<sub>15</sub> (A. 335, 238 C. 1904 [2] 1204).
- $C_3H_5O_4N_3$  \*2) Amid d. Nitromethandicarbonsäure. Ag (M. 25, 58 C. 1904 [1] 1552; M. 25, 691 C. 1904 [2] 1110).
- \*3)  $\beta$ -Nitro- $\alpha\gamma$ -Dioximidopropan. Na<sub>2</sub> (Am. 29, 260 C. 1903 [1] 957).

- $C_3H_5O_4P$  1) Phosphat d.  $\alpha\beta\gamma$ -Trioxypropan (*C. r.* 138, 49 *C.* 1904 [1] 431).
- $C_3H_5O_5N$  \*1) Nitrat d.  $\alpha$ -Oxypropionsäure. Fl. (*C. r.* 137, 1263 *C.* 1904 [1] 434).
- 2)  $\beta$ -Nitro- $\alpha$ -Oxypropionsäure. Sm. 76–77°. Ca, Ba, Ag (*Am.* 32, 238 *C.* 1904 [2] 1141).
- 3) Nitrat d. Oxyessigsäuremethylester. Sd. 165° u. Zers. (*C. r.* 137, 1263 *C.* 1904 [1] 434).
- $C_3H_5NBr_2$  \*2) Aethylimidodibrommethan. Sm. 50–55°; Sd. 145–147° (*Bl.* [3] 31, 606 *C.* 1904 [2] 28).
- $C_3H_6NS_2$  \*1) 2-Merkapto-4,5-Dihydrothiazol. Sm. 105–106° (*C.* 1904 [1] 431; *B.* 36, 1231 *C.* 1903 [1] 1215).
- $C_3H_5Br_2S_2$  1) Verbindung (aus Bromäthan) (*C.* 1903 [1] 19).
- $C_3H_5OCl_2$  \*3) Chlormethyläther d.  $\beta$ -Chlor- $\alpha$ -Oxyäthan. Sd. 153–155°. + 2Pyridin (*A.* 330, 126 *C.* 1904 [1] 1064).
- 4) Chlormethyläther d.  $\alpha$ -Chlor- $\alpha$ -Oxyäthan. + 2Pyridin (*A.* 330, 124 *C.* 1904 [1] 1064).
- $C_3H_6OS$  5) Thiolpropionsäure. Fl. (*B.* 36, 1009 *C.* 1903 [1] 1077).
- $C_3H_6OS_2$  \*1) Aethylxanthogensäure. Salze (*Z. a. Ch.* 41, 233 *C.* 1904 [2] 1107).
- $C_3H_6O_2N_2$  \*1)  $\alpha\beta$ -Dioximidopropan. Sm. 150° (*G.* 34 [1] 207 *C.* 1904 [1] 1485).
- \*6) Monomethylamid d. Oxaminsäure. Sm. 231–233° (*Soc.* 83, 20 *C.* 1903 [1] 448).
- $C_3H_6O_2Cl_2$  2)  $\beta\beta$ -Dichlor- $\alpha\gamma$ -Dioxypropan (*C.* 1904 [1] 576).
- $C_3H_6O_2S$  \*1)  $\alpha$ -Merkaptopropionsäure (*C.* 1903 [1] 15; *H.* 42, 351, 365 *C.* 1904 [2] 979).
- \*2)  $\beta$ -Merkaptopropionsäure (*H.* 42, 351 *C.* 1904 [2] 979).
- $C_3H_6O_3N_2$  \*1) Propylnitrosäure. Sm. 66° u. Zers. (*G.* 33 [1] 511 *C.* 1903 [2] 938).
- \*8) Methylester d. Methylnitrosamidoameisensäure. Sd. 59–60°, 15 (*B.* 36, 2478 *C.* 1903 [2] 559).
- 13) Methylderivat d. Nitroessigsäureamid. Sm. 112° (*M.* 25, 730 *C.* 1904 [2] 1111).
- $C_3H_6O_4N_2$  \*1)  $\alpha\alpha$ -Dinitropropan. K. (*J. pr.* [2] 67, 138 *C.* 1903 [1] 865; *G.* 33 [1] 414 *C.* 1903 [2] 551).
- \*5) Malondihydroxamsäure. Sm. 160° (*Soc.* 81, 1572 *C.* 1903 [1] 158).
- $C_3H_6O_5N_2$  C 24,0 — H 4,0 — O 53,3 — N 18,7 — M. G. 150.
- 1) Methyläther d.  $\beta\beta$ -Dinitro- $\alpha$ -Oxyäthan. Sd. 84°. K. (*B.* 36, 436 *C.* 1903 [1] 563).
- $C_3H_8NBr_3$  2) Aethylimidodibrommethanhydrobromid (*Bl.* [3] 31, 608 *C.* 1904 [2] 29).
- $C_3H_6N_2S$  \*1) Aethylenthioharnstoff. Sm. 194° (*Ar.* 240, 675 *C.* 1903 [1] 393).
- $C_3H_7ON$  \*2)  $\alpha$ -Amido- $\beta$ -Ketopropan. HCl (*M.* 25, 1074 *C.* 1904 [2] 1659).
- \*6) Formimidäthyläther. (HCl, HgCl<sub>2</sub>) (*Am.* 31, 207 *C.* 1904 [1] 1064).
- \*7) Amid d. Propionsäure. HBr (*B.* 36, 155 *C.* 1903 [1] 444).
- 14) Aldehyd d.  $\alpha$ -Amidopropionsäure. HCl (*B.* 37, 615 *C.* 1904 [1] 925).
- $C_3H_7ON_3$  4) Acetylguanidin. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>) (*Ar.* 241, 471 *C.* 1903 [2] 983).
- $C_3H_7OCl$  \*1)  $\beta$ -Chlor- $\alpha$ -Oxypropan. Fl. (*C.* 1903 [2] 486).
- \*3)  $\alpha$ -Chlor- $\beta$ -Oxypropan (*C.* 1903 [2] 486).
- \*6) Chlormethyläther d. Oxyäthan. Sd. 82° (*A.* 330, 122 *C.* 1904 [1] 1064; *A.* 334, 62 *C.* 1904 [2] 949).
- $C_3H_7O_2N$  \*5)  $\beta$ -Oximido- $\alpha$ -Oxypropan. Sm. 68–70°; Sd. 123–125°, 18 (*A.* 335, 259 *C.* 1904 [2] 1283).
- \*15) Methylester d. Methylamidoameisensäure. Sd. 64–65°, 14 (*B.* 36, 2476 *C.* 1903 [2] 559).
- \*16) Aethylester d. Amidoameisensäure. Sm. 49° (*B.* 36, 2475 *C.* 1903 [2] 559).
- $C_3H_7O_2N_3$  \*3) Guanidinsäure (Glykocyamin). Zers. bei 250–260°. Pikrat (*Am.* 29, 491 *C.* 1903 [1] 1310).
- 5) Methyläther d.  $\alpha$ -Amidoformylimido- $\alpha$ -Amido- $\alpha$ -Oxymethan (O-Methylisobiuret). Sm. 118° (*C.* 1904 [2] 29).
- 6) Amid d. Ureidoessigsäure. Sm. 204° u. Zers. (*Am.* 28, 391 *C.* 1903 [1] 90).
- $C_3H_7O_2J$  \*1)  $\gamma$ -Jod- $\alpha\beta$ -Dioxypropan. Sd. 62°, 24 (*A.* 335, 235 *C.* 1904 [2] 1204).
- $C_3H_7O_3N$  \*7)  $\beta$ -Amido- $\alpha$ -Oxypropionsäure. Sm. 234–235° (241°). Cu + 3H<sub>2</sub>O (*C.* 1903 [2] 343; *B.* 37, 337 *C.* 1904 [1] 647; *B.* 37, 343 *C.* 1904 [1] 646; *Am.* 32, 240 *C.* 1904 [2] 1141; *J. pr.* [2] 70, 201 *C.* 1904 [2] 1459).

- $C_3H_7O_3N$  \*8)  $\alpha$ -Amido- $\beta$ -Oxypropionsäure (*H.* 39, 156 *C.* 1903 [2] 580).  
 $C_3H_7O_4P$  \*1) Allylphosphorsäure (*C. r.* 138, 762 *C.* 1904 [1] 1196).  
 $C_3H_7NS_2$  \*2) Aethylester d. Amidodithioameisensäure. Sm. 42° (*C. r.* 135, 975 *C.* 1903 [1] 139).  
 5) Dimethyläther d. Imidodimerkaptomethan. HJ (*C. r.* 135, 976 *C.* 1903 [1] 139; *B.* [3] 29, 54 *C.* 1903 [1] 446).  
 $C_3H_5ON_2$  \*4) uns-Dimethylharnstoff. Sm. 182° (*B.* 36, 1197 *C.* 1903 [1] 1215).  
 12)  $\alpha$ -Acetyl- $\alpha$ -Methylhydrazin. Sm. 98° (*B.* 36, 3189 *C.* 1903 [2] 939).  
 $C_3H_8O_2N_2$  \*6)  $\alpha$ - $\beta$ -Diamidopropionsäure. HCl (*B.* 37, 342 *C.* 1904 [1] 646; *H.* 42, 59 *C.* 1904 [2] 608).  
 \*8) Aethylester d. Hydrazidoameisensäure. Sm. 45°; Sd. 92°<sub>13</sub> HCl (*B.* 36, 745 *C.* 1903 [1] 827; P. GUTMANN, Dissert. Heidelberg 1903; *J. pr.* [2] 70, 276 *C.* 1904 [2] 1544).  
 $C_3H_8O_2S$  3) Propan- $\alpha$ -Sulfinssäure. Mg + 2H<sub>2</sub>O (*B.* 37, 2153 *C.* 1904 [2] 186).  
 $C_3H_8O_6S_2$  \*2) Propan- $\alpha$ - $\gamma$ -Disulfonsäure. (NH<sub>4</sub>)<sub>2</sub>Ag<sub>2</sub> (*B.* 37, 3808 *C.* 1904 [2] 1564).  
 $C_3H_8O_9S_3$  \*1) Propan- $\alpha$ - $\beta$ - $\gamma$ -Trisulfonsäure. (NH<sub>4</sub>)<sub>3</sub> + H<sub>2</sub>O, Ba<sub>3</sub> + 5H<sub>2</sub>O (*Am.* 32, 165 *C.* 1904 [2] 944).  
 $C_3H_8N_2S$  \*7) Aethylpseudothioharnstoff. HBr (*Soe.* 83, 566 *C.* 1903 [1] 1123; *Am.* 29, 483 *C.* 1903 [1] 1309).  
 $C_3H_9ON$  \*2)  $\beta$ -Methylamido- $\alpha$ -Oxyäthan. (HCl, AuCl<sub>3</sub>) (*B.* 36, 3082 *C.* 1903 [2] 955).  
 $C_3H_9OAS$  \*1) Trimethylarsenoxyd (*C. r.* 139, 599 *C.* 1904 [2] 1451).  
 $C_3H_9O_3P$  \*2) Trimethylester d. Phosphorigensäure. PtCl<sub>2</sub> (*Z. a. Ch.* 37, 398 *C.* 1904 [1] 157).  
 4)  $\alpha$ -Oxyisopropylmetaphosphorige Säure. Sm. 52°. Pb (*C.* 1904 [2] 1708).  
 $C_3H_9O_3B$  \*1) Trimethylester d. Borsäure. Sd. 65° (*B.* 36, 2221 *C.* 1903 [2] 420).  
 $C_3H_9O_4P$  \*5)  $\alpha$ -Oxyisopropylphosphinsäure. Na<sub>3</sub> + 4H<sub>2</sub>O (*C.* 1904 [2] 1708).  
 $C_3H_9O_6P$  \*1) 1-Glycerinphosphorsäure (aus Lecithin). Ca + <sup>3</sup>/<sub>4</sub>H<sub>2</sub>O, Ba + <sup>1</sup>/<sub>2</sub>H<sub>2</sub>O (*C. r.* 138, 48 *C.* 1904 [1] 431; *B.* 37, 3754 *C.* 1904 [2] 1535).  
 2) isom. Glycerinphosphorsäure (aus Glycerin u. Phosphorsäure). Ca + 1<sup>1</sup>/<sub>2</sub>H<sub>2</sub>O, Ba + H<sub>2</sub>O (*J. pr.* [1] 36, 257; *B.* 37, 3757 *C.* 1904 [2] 1535).  
 $C_3H_9N_3S$  \*2)  $\alpha$ -Amido- $\alpha$ - $\beta$ -Dimethylthioharnstoff. Sm. 137—138° (*B.* 37, 2320 *C.* 1904 [2] 311).  
 $C_3H_9ClS$  \*1) Trimethylsulfinchlorid (*J. pr.* [2] 66, 453 *C.* 1903 [1] 561).  
 $C_3H_9J_2As$  \*1) Trimethylarsenjodid (*C. r.* 137, 297 *C.* 1904 [1] 80).  
 $C_3H_9J_3S$  1) Trimethylsulfintrijodid. Sm. 38° (*C.* 1904 [2] 415).  
 $C_3H_9J_3Se$  1) Trimethylselenintrijodid. Sm. 39° (*C.* 1904 [2] 415).  
 $C_3H_9J_3Te$  1) Trimethyltellurtrijodid. Sm. 76,5° (*C.* 1904 [2] 415).  
 $C_3H_{10}OSn$  \*1) Zinntrimethyloxyhydrat (*C.* 1903 [2] 553).  
 $C_3H_{10}O_2P_2$  \*1) Verbindung (aus Glycerin). Ca (*C. r.* 136, 1457 *C.* 1903 [2] 281).  
 $C_3ON_2S_2$  1) Carbonyldithiocarbimid (*Soe.* 83, 84 *C.* 1903 [1] 230, 447).  
 $C_3N_3S_3P$  2) Phosphortrithiocyanat. Sd. 163°<sub>15</sub> (*Soe.* 85, 353 *C.* 1904 [1] 935, 1407).

## — 3 IV —

- $C_3H_2O_2N_2Cl_2$  1) 5,5-Dichlor-2,4-Diketotetrahydroimidazol? Sm. 120—121° (*A.* 327, 380 *C.* 1903 [2] 661).  
 $C_3H_2O_2N_2S$  2) 1,2,3-Thiodiazol-4-Carbonsäure. Zers. bei 228° (*A.* 333, 11 *C.* 1904 [2] 780).  
 $C_3H_2OClBr_2$  \*1) Chlorid d.  $\alpha$ - $\beta$ -Dibrompropionsäure. Sd. 71—73°<sub>12</sub> (*B.* 37, 2508 *Ann.* *C.* 1904 [2] 427).  
 $C_3H_2O_2N_3S$  2) 6-Merkapto-2,4-Dioxy-1,3,5-Triazin + <sup>3</sup>/<sub>4</sub>H<sub>2</sub>O. (Thiocyanursäure). Zers. bei 316° (*B.* 36, 3196 *C.* 1903 [2] 956).  
 $C_3H_4ON_2Se$  2) 2-Imido-4-Ketotetrahydroselenazol. (Selenhydantoïn.) Sm. 190° u. Zers. (*Ar.* 241, 193 *C.* 1903 [2] 103).  
 3) Amid d. Selenocyanessigsäure. Sm. 123—124° (*Ar.* 241, 198 *C.* 1903 [2] 103).  
 $C_3H_4O_2NCl$  3)  $\alpha$ -Chlor- $\alpha$ -Nitroso- $\beta$ -Ketopropan. Sm. 110°; Sd. 180—185° u. Zers. (*C.* 1903 [2] 486).  
 $C_3H_4O_4NBr$  1) Methylester d. Bromnitroessigsäure. Sd. 103°<sub>15</sub>. NH<sub>4</sub> (*A.* 328, 249 *C.* 1903 [2] 1000).  
 $C_3H_4O_4N_3Br$  1) Amid d. Bromnitromalonsäure. Sm. 131—132° (*M.* 25, 694 *C.* 1904 [2] 1110).

- $C_3H_5O_5N_2Br$  2) Methyläther d.  $\beta$ -Brom- $\beta\beta$ -Dinitro- $\alpha$ -Oxyäthan. *Sd.* 84°, (*B.* 36, 437 *C.* 1903 [1] 563).
- $C_3H_5N_2ClS$  1) Chlormethylat d. 1,2,3-Thiodiazol. *Sm.* 192° u. Zers. 2 +  $PtCl_4$ , +  $AuCl_3$  (*A.* 333, 21 *C.* 1904 [2] 781).
- $C_3H_5N_2JS$  1) Jodmethylat d. 1,2,3-Thiodiazol. *Sm.* 222° u. Zers. (*A.* 333, 20 *C.* 1904 [2] 781).
- $C_3H_5ON_3Cl$  1) Chloracetylguanidin.  $HCl$ , ( $2HCl$ ,  $PtCl_4$  +  $2H_2O$ ), ( $HCl$ ,  $AuCl_3$ ) (*Ar.* 241, 473 *C.* 1903 [2] 989).
- $C_3H_5O_2N_2S$  4) Methylester d. Thiopseudoallophansäure.  $HCl$  (*Soc.* 83, 567 *C.* 1903 [1] 1123).
- $C_3H_5NClBr_2$  1) Äthylimidodibrommethanhydrochlorid (*Bl.* [3] 31, 608 *C.* 1904 [2] 29).
- $C_3H_5NBr_2J$  1) Äthylimidodibrommethanhydrojodid (*Bl.* [3] 31, 608 *C.* 1904 [2] 29).
- $C_3H_5O_3ClP$  2) Verbindung (aus Glycerin). *Ca* (*C. r.* 136, 1458 *C.* 1903 [2] 281).
- $C_3H_5NCl_2P$  1) Propylamidodichlorphosphin. *Sd.* 97°<sub>10</sub> (*A.* 326, 150 *C.* 1903 [1] 760).
- $C_3ON_3S_3P$  \*1) Phosphoryltrithiocyanat. *Sd.* 175°<sub>21</sub> (*Soc.* 85, 362 *C.* 1904 [1] 935, 1407).

— 3 V —

- $C_3H_5ONCl_2P$  1) Propylmonamid d. Phosphorsäuredichlorid. *Sd.* 146°<sub>18</sub> (*A.* 326, 173 *C.* 1903 [1] 819).
- $C_3H_5NCl_2SP$  1) Propylmonamid d. Thiophosphorsäure. *Sd.* 121°<sub>17</sub> (*A.* 326, 203 *C.* 1903 [1] 821).

**C<sub>4</sub>-Gruppe.**

- $C_4H_8$  \*2)  $\alpha\gamma$ -Butadien (Erythren) (*C.* 1903 [2] 489).
- 7) Kohlenwasserstoff (aus  $\alpha\beta\gamma\delta$ -Tetrabrombutan) (*J. pr.* [2] 67, 421 *C.* 1903 [1] 1296).
- $C_4H_8$  \*4) Isobutylene (*B.* 36, 1997 *C.* 1903 [2] 335).

— 4 II —

- $C_4H_2O_4$  \*1) Äthindicarbonsäure. Monopyridinsalz, Monochinolinsalz (*C. r.* 137, 1064 *C.* 1904 [1] 262).
- $C_4H_2Rb_2$  1) Rubidiumcarbidacetylen (*C. r.* 136, 1219 *C.* 1903 [2] 105).
- $C_4H_2Ss_2$  1) Cäsiumcarbidacetylen (*C. r.* 136, 1217 *C.* 1903 [2] 105).
- $C_4H_4O_2$  \*3) Laktone d.  $\gamma$ -Oxypropen- $\alpha$ -Carbonsäure. *Sm.* 4°; *Sd.* 95—96°<sub>13</sub> (*C. r.* 138, 1051 *C.* 1904 [1] 1482).
- $C_4H_4O_3$  \*3) Tetronsäure. *Na* (*B.* 36, 471 *C.* 1903 [1] 627).
- \*5) Anhydrid d. Bernsteinsäure (*Am.* 31, 267 *C.* 1904 [1] 1078).
- $C_4H_4O_4$  \*1) Fumarsäure. Pyridinsalz, Chinolinsalz, Dichinaldinsalz (*C.* 1903 [2] 712; *C. r.* 137, 1064 *C.* 1904 [1] 262; *B.* 36, 4317 *C.* 1904 [1] 449).
- \*2) Maleinsäure (*C.* 1903 [2] 712).
- $C_4H_4O_5$  \*1) Oxalelessigsäure. Zers. bei 148—150°.  $Ag_2$  (*C. r.* 137, 855 *C.* 1904 [1] 85; *A.* 331, 101 *C.* 1904 [1] 931).
- $C_4H_4N_2$  \*1) 1,2-Diazin. *Sm.* —8°; *Sd.* 205°<sub>55</sub>. ( $2HCl$ ,  $PtCl_4$ ), 2 +  $PtCl_4$ , +  $AuCl_3$ , Pikrat (*C. r.* 136, 369 *C.* 1903 [1] 652).
- $C_4H_5N$  \*5) Nitril d. Propen- $\alpha$ -Carbonsäure (*C. r.* 137, 262 *C.* 1903 [2] 657).
- $C_4H_5N_3$  2) 2-Amido-1,3-Diazin. *Sm.* 127—128°.  $HCl$ , Pikrat (*B.* 36, 2229 *C.* 1903 [2] 448).
- 3) 4-Amido-1,3-Diazin. *Sm.* 150—152° (*B.* 36, 2232 *C.* 1903 [2] 448).
- $C_4H_6O$  \*1) Methyläther d.  $\gamma$ -Oxypropin. 2 +  $3(HgCl_2, HgO)$  (*G.* 33 [1] 317 *C.* 1903 [2] 281).
- $C_4H_6O_2$  \*6)  $\alpha$ -Crotonsäure. Brucinsalz, Chininsalz (*Soc.* 85, 347 *C.* 1904 [1] 1067, 1401; *C.* 1904 [2] 1206).
- \*7)  $\beta$ -Crotonsäure. Brucinsalz, Chininsalz (*Soc.* 85, 347 *C.* 1904 [1] 1067, 1401; *C.* 1904 [2] 1238).
- \*9) Metakrylsäure (*B.* 36, 1271 *C.* 1903 [1] 1219).
- \*11) R-Trimethylencarbonsäure (*Soc.* 83, 1378 *C.* 1904 [1] 162, 437).
- \*19) Propen- $\gamma$ -Carbonsäure. *Sd.* 167—169° (*B.* 36, 2897 *C.* 1903 [2] 825; *A.* 314, 201 *C.* 1904 [2] 884).

- $C_4H_8O_3$  \*8)  $\alpha$ -Ketopropan- $\alpha$ -Carbonsäure. Ba +  $H_2O$  (A. 331, 124 C. 1904 [1] 932).
- \*13) Anhydrid d. Essigsäure (G. 33 [1] 77 C. 1903 [1] 1109).
- 26) Verbindung [aus dem Aethylester d.  $\alpha$ -(4-Dimethylamido)butyryl- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure]. Sm. 88° (B. 36, 2231 C. 1903 [2] 448).
- $C_4H_8O_4$  \*1) Aethan- $\alpha$ -Dicarbonsäure. Sm. 132° (C. 1903 [2] 1330; A. 325, 145 C. 1903 [1] 644; M. 24, 116 C. 1903 [1] 967).
- \*2) Bernsteinsäure (C. 1903 [2] 712; C. r. 135, 1352 C. 1903 [1] 320; C. 1904 [1] 505).
- \*3) Acetoxylessigsäure. Sm. 66—68°; Sd. 144—145°<sub>12</sub> (B. 36, 466 C. 1903 [1] 626).
- \*4) Superoxyd d. Essigsäure (Am. 29, 182 C. 1903 [1] 959).
- $C_4H_8O_5$  \*4)  $\beta$ -Oxyäthan- $\alpha$ -Dicarbonsäure. Ca, Cu (C. 1904 [2] 641).
- \*6) i-Aepfelsäure. Monochinolinsalz (G. 33 [2] 139 C. 1903 [2] 1315; C. r. 137, 1064 C. 1904 [1] 262).
- \*7) i-Aepfelsäure (C. r. 135, 1352 C. 1903 [1] 320).
- 21) Bernsteinmonopersäure. Sm. 107° u. Zers. (Am. 32, 61 C. 1904 [2] 766).
- $C_4H_8O_6$  \*1) d-Weinsäure (C. r. 135, 1352 C. 1903 [1] 320; A. 328, 152 C. 1903 [2] 987).
- \*3) Mesoweinsäure (B. 35, 4344 C. 1903 [1] 282).
- $C_4H_8N_2$  \*5) 5-Methylpyrazol (C. 1903 [2] 1323).
- \*8) 4- (oder 5-) Methylimidazol. Sm. 55° (Soc. 83, 404 C. 1903 [1] 931, 1143).
- $C_4H_8N_4$  C 43,6 — H 5,4 — N 50,9 — M. G. 110.
- 1) 2,4 Diamido-1,3-Diazin. Sm. 144—145° (2HCl, PtCl<sub>4</sub>) (B. 36, 2233 C. 1903 [2] 449).
- 2) 4,6-Diamido-1,3-Diazin. Sm. 267° (B. 36, 2231 C. 1903 [2] 448).
- $C_4H_8Br_2$  \*2)  $\alpha$  $\delta$ -Dibrom- $\beta$ -Buten. Sm. 51° (C. 1903 [2] 489).
- $C_4H_7N_3$  \*4) 2,5-Dimethyl-1,3,4-Triazol. Sm. 141—142°; Sd. 159°<sub>10</sub>. + AgNO<sub>3</sub> (J. pr. [2] 69, 153 C. 1904 [1] 1274).
- $C_4H_7Br$  10) Bromderivat (aus dem Kohlenwasserstoff C<sub>4</sub>H<sub>6</sub>). Sd. 102—107° (J. pr. [2] 67, 421 C. 1903 [1] 1296).
- $C_4H_7J$  \*3) 1-Jodmethyl-R-Trimethylen. Sd. 134°<sub>733</sub> (C. 1903 [2] 489).
- $C_4H_8O$  \*9)  $\beta$ -Methylpropan- $\alpha$ - $\beta$ -Oxyd (B. 36, 2018 C. 1903 [2] 338).
- \*10)  $\beta$ -Ketobutan (C. r. 137, 576 C. 1903 [2] 1110; M. 25, 336 C. 1904 [1] 1400).
- \*12) Aldehyd d. Buttersäure (B. 37, 188 C. 1904 [1] 638).
- \*13) Aldehyd d. Isobuttersäure (C. r. 138, 91 C. 1904 [1] 505; M. 25, 188 C. 1904 [1] 1000).
- $C_4H_8O_2$  17) Methyläther d.  $\alpha$ -Oxy- $\beta$ -Ketopropan. Sd. 112—114° (G. 33 [1] 317 C. 1903 [2] 281; C. 1904 [2] 302).
- 18) Methyläther d.  $\eta$ -Oxypropan- $\alpha$  $\beta$ -Oxyd. Sd. 115—116° (C. 1904 [2] 303).
- $C_4H_8O_3$  \*2) Methylenäther d.  $\alpha$  $\beta$  $\gamma$ -Trioxypropan. Sd. 90—91°<sub>18</sub> (A. 335, 215 C. 1904 [2] 1202).
- \*6) i- $\beta$ -Oxybuttersäure (H. 37, 355 C. 1903 [1] 738).
- $C_4H_8O_4$  \*2) i- $\alpha$  $\beta$ -Dioxybuttersäure. Ba + 2H<sub>2</sub>O, Brucinsalz, Chininsalz, Chinidiusalz (Soc. 85, 199 C. 1904 [1] 933).
- \*12) d-Erythrose (C. 1904 [2] 1291).
- \*14) d- $\alpha$  $\beta$ -Dioxybuttersäure. Ba (Soc. 85, 202 C. 1904 [1] 934).
- 17) l- $\alpha$  $\beta$ -Dioxybuttersäure. Sm. 74—75°. Ba (Soc. 85, 201 C. 1904 [1] 788, 934).
- $C_4H_8O_5$  \*4) d-Erythronsäure (H. 37, 424 C. 1903 [1] 1147).
- $C_4H_8N_2$  \*2) 5-Methyl-4,5-Dihydropyrazol (M. 24, 443 C. 1903 [2] 617).
- \*6) Nitril d. Dimethylamidoessigsäure. Sd. 139° (C. 1904 [2] 945, 1377).
- 7) Nitril d. Aethylamidoessigsäure. Sd. 166—167° (B. 37, 4092 C. 1904 [2] 1725).
- $C_4H_9N$  9) Aethylimidoäthan. Sd. 48° (C. 1904 [2] 945).
- $C_4H_9Cl$  \*4)  $\beta$ -Chlor- $\beta$ -Methylpropan (C. 1904 [2] 691).
- $C_4H_9Br$  \*3) Isobutylbromid (B. 36, 1989 C. 1903 [2] 334).
- \*4)  $\beta$ -Brom- $\beta$ -Methylpropan. Sm. 72° (B. 36, 1988 C. 1903 [2] 334; C. 1904 [1] 1065).
- $C_4H_9J$  \*4)  $\beta$ -Jod- $\beta$ -Methylpropan (C. 1904 [2] 691).

- $C_4H_{10}O$  \*1)  $\alpha$ -Oxybutan (*C. r.* 136, 1261 *C. 1903* [2] 105).  
 \*2)  $\beta$ -Oxybutan (*C. r.* 137, 302 *C. 1903* [2] 708).  
 \*3) Isobutylalkohol (*C. r.* 137, 302 *C. 1903* [2] 708).  
 \*4) Trimethylcarbinol. Sm. 25,45°; Sd. 82,8°<sub>761</sub> (*C. r.* 136, 1035 *C. 1903* [1] 1296).  
 \*6) Diäthyläther. + 5HCl, + HBr, + HJ, + AlCl<sub>3</sub> (*Soc.* 85, 925 *C. 1904* [2] 585; *Soc.* 85, 1106 *C. 1904* [2] 976).  
 8) Methyläther d.  $\beta$ -Oxypropan. Sd. 32,5°<sub>777</sub> (*C. 1904* [1] 1065).  
 $C_4H_{10}O_2$  \*2)  $\alpha\gamma$ -Dioxybutan (*M.* 25, 1 *C. 1904* [1] 715; *M.* 25, 332 *C. 1904* [1] 1400).  
 $C_4H_{10}O_3$  7) Dimethyläther d. Di[Oxymethyl]äther. Sd. 106—108° (*C. r.* 138, 1705 *C. 1904* [2] 416).  
 $C_4H_{10}O_4$  \*3) d-Erythrit. Sm. 88,5—89° (*C. 1904* [2] 1291).  
 $C_4H_{10}S$  \*6) Diäthylsulfid (*G.* 33 [1] 77 *C. 1903* [1] 1109).  
 $C_4H_{11}N$  \*1)  $\alpha$ -Amidobutan. (2HCl, SnCl<sub>4</sub>), (2HCl, PtCl<sub>4</sub>) (*C. 1904* [1] 923).  
 \*4) tert. Butylamin (*B.* 36, 685 *C. 1903* [1] 817).  
 \*6) Diäthylamin. (HCl + HgCl<sub>2</sub> + H<sub>2</sub>O), (2HCl, SnCl<sub>4</sub>), (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 66, 469 *C. 1903* [1] 561; *C. 1904* [1] 923).  
 \*8) d- $\beta$ -Amidobutan. Sd. 63°. HCl, Bitartrat (*B.* 36, 583 *C. 1903* [1] 695; *Ar.* 242, 48 *C. 1904* [1] 997; *Ar.* 242, 53 *C. 1904* [1] 997).  
 11) l- $\beta$ -Amidobutan. Sd. 63°. HCl, Bitartrat (*B.* 36, 583 *C. 1903* [1] 695).  
 12) Base (aus Spilanthol). HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AnCl<sub>3</sub>) (*Ar.* 241, 283 *C. 1903* [2] 452).  
 $C_4H_{12}N_2$  \*6)  $\alpha\gamma$ -Diamidobutan. Sd. 147—150°<sub>790</sub>. 2HCl (*B.* 36, 1924 *C. 1903* [2] 209).  
 $C_4O_4Ni$  \*1) Kohlenoxydnickel (*C. 1903* [1] 1250; *Ph. Ch.* 46, 37 *C. 1904* [1] 361; *Soc.* 85, 203 *C. 1904* [1] 632, 919; D.R.P. 149559 *C. 1904* [1] 1048; *C. 1904* [2] 1111).

## — 4 III —

- $C_4HN_2Cl_3$  \*1) 2,4,6-Trichlor-1,3-Diazin. Sd. 213° (*B.* 37, 3657 *C. 1904* [2] 1416).  
 $C_4H_2O_3N_4$  \*2) Verbindung (aus Acetylen). Sm. 108° (*G.* 33 [2] 321 *C. 1904* [1] 255).  
 $C_4H_2O_7N_8$  C 19,5 — H 0,8 — O 45,5 — N 34,1 — M. G. 246.  
 1) Verbindung (aus Acetylen). Sm. 78° u. Zers. (*G.* 33 [2] 320 *C. 1904* [1] 255).  
 $C_4H_2NCl_3$  1) 2,3,5-Trichlorpyrrol. Fl. (*G.* 34 [1] 256 *C. 1904* [1] 120; *G.* 34 [1] 414 *C. 1904* [2] 452).  
 $C_4H_3ON_3$  C 52,7 — H 3,3 — O 17,6 — N 26,4 — M. G. 109.  
 1) Cyanamid d. Cyanessigsäure. Sm. 93° u. Zers. (D.R.P. 151597 *C. 1904* [2] 69).  
 $C_4H_3O_2N$  3) Imid d. Maleinsäure. Sm. 93° (*C. 1904* [2] 305).  
 $C_4H_3O_3N$  \*2) Verbindung (aus Acetylen). Sm. 149° (*G.* 33 [2] 323 *C. 1904* [1] 256).  
 $C_4H_3O_3Cl_3$  3) Formaltrichlormilchsäure. Sm. 32°; Sd. 162°<sub>15</sub> (*R.* 21, 317 *C. 1903* [1] 137).  
 $C_4H_3O_4N_3$  \*7) 1,2,3-Triazol-4,5-Dicarbonsäure + 2H<sub>2</sub>O. Sm. 201° u. Zers. (*A.* 325, 154 *C. 1903* [1] 644).  
 $C_4H_3O_4Br$  \*1) Bromfumarsäure. Monopyridinsalz (*C. r.* 137, 1065 *C. 1904* [1] 262).  
 $C_4H_3O_5N_3$  \*2) 1-Oxy-1,2,3-Triazol-4,5-Dicarbonsäure. Sm. 91—92°. K + H<sub>2</sub>O (*A.* 325, 165 *C. 1903* [1] 645).  
 $C_4H_3NS_2$  1) Dimethyläther d. Methylimidodimerkaptomethan (*C. r.* 136, 452 *C. 1903* [1] 699).  
 $C_4H_3N_3Cl_2$  1) 4,6-Dichlor-2-Amido-1,3-Diazin. Sm. 221° (*B.* 36, 2228 *C. 1903* [2] 448).  
 2) 2,6-Dichlor-4-Amido-1,3-Diazin. Sm. 270—271° (*B.* 36, 2228 *C. 1903* [2] 448).  
 $C_4H_4O_2N_2$  \*10) Uracil. Sm. 338° (*H.* 37, 527 *C. 1903* [1] 1218; *Am.* 29, 485 *C. 1903* [1] 1309).  
 12) 3-Nitropyrrol (*C. 1902* [2] 704; *1903* [2] 121).  
 $C_4H_4O_2N_4$  2) Nitril d.  $\alpha$ -Oximido- $\beta$ -Nitrosimidopropionsäure. NH<sub>4</sub> (*B.* 37, 3469 *C. 1904* [2] 1305).  
 $C_4H_4O_3N_2$  11) Methyläther d. 2-Oxy-4,5-Diketo-4,5-Dihydroimidazol (Methylparabansäure). Sm. 137,5°. (2HCl, PtCl<sub>4</sub>) (*C. 1904* [2] 30).  
 $C_4H_4O_3N_4$  4) 4-Nitramido-2-Keto-1,2-Dihydro-1,3-Diazin. Zers. oberh. 300° (*Am.* 31, 605 *C. 1904* [2] 243).  
 $C_4H_4O_4N_4$  \*8) Diamid d. 1,2,3,6-Dioxdiazin-4,5-Dicarbonsäure. Sm. 253° (*Bl.* [3] 27, 1166 *C. 1903* [1] 228).

- $C_4H_4O_4Br_2$  \*1)  $\alpha\beta$ -Dibrombernsteinsäure. Monopyridinsalz, Dichinolinsalz, Monochinaldinsalz (*C. r.* 137, 1064 *C.* 1904 [1] 262).
- $C_4H_4O_5N_2$  \*1) Alloxansäure.  $K + 3H_2O$  (*A.* 333, 89 *C.* 1904 [2] 828).  
5)  $\alpha$ -Amid d.  $\alpha$ -Nitroäthen- $\alpha\beta$ -Dicarbonsäure ( $\alpha$ -A. d. Nitromaleinsäure).  $NH_4$ , K, Na, Ag (*Am.* 32, 235 *C.* 1904 [2] 1141).
- $C_4H_4O_{10}N_2$  \*1) Dinitroweinsäure (*Soc.* 83, 155 *C.* 1903 [1] 627).
- $C_4H_4NBr$  2) Nitril d.  $\gamma$ -Brompropen- $\alpha$ -Carbonsäure. Sm.  $-14^\circ$ ; Sd.  $84^\circ_{12}$  (*C. r.* 138, 1051 *C.* 1904 [1] 1481).
- $C_4H_4N_2S_3$  1) 2,4,6-Trimerkapto-1,3-Diazin (*B.* 36, 2234 *C.* 1903 [2] 449).
- $C_4H_4N_3Cl$  1) 4-Chlor-2-Amido-1,3-Diazin. Zers. bei  $168^\circ$ . ( $2HCl$ ,  $PtCl_4$ ) (*B.* 36, 3383 *C.* 1903 [2] 1193).
- $C_4H_4N_3J$  1) 6-Jod-4-Amido-1,3-Diazin. Sm.  $211-212^\circ$  (*B.* 36, 2231 *C.* 1903 [2] 448).
- $C_4H_5ON_3$  2) 4-Amido-2-Keto-1,2-Dihydro-1,3-Diazin  $+ H_2O$  (Cytosin). Zers. bei  $320-325^\circ$ .  $2HCl$ , ( $2HCl$ ,  $PtCl_4$ ),  $HNO_3$ ,  $H_2SO_4$ , Pikrat (*B.* 27, 2219; *H.* 37, 377 *C.* 1903 [1] 725; *Am.* 29, 498 *C.* 1903 [1] 1311; *Am.* 29, 505 *C.* 1903 [1] 1311; *H.* 38, 49 *C.* 1903 [1] 1364; *H.* 38, 80 *C.* 1903 [1] 1366; *H.* 38, 170 *C.* 1903 [1] 1417; *H.* 39, 7 *C.* 1903 [2] 449; *Am.* 31, 598 *C.* 1904 [2] 242). — IV, 1623.  
3) 2-Amido-4-Oxy-1,3-Diazin (2-Amido-4-Keto-3,4-Dihydro-1,3-Diazin). Sm.  $276^\circ$  u. Zers. ( $2HCl$ ,  $PtCl_4$ ), ( $HCl$ ,  $AuCl_3$ ), Pikrat (*Am.* 29, 501 *C.* 1903 [1] 1311; *B.* 36, 3382 *C.* 1903 [2] 1193).  
4) Base  $+ H_2O$  (aus Störtestikeln). ( $2HCl$ ,  $PtCl_4$ ) (*H.* 37, 178 *C.* 1903 [1] 240).
- $C_4H_5OCl_3$  6) Aldehyd d.  $\gamma\gamma\gamma$ -Trichlorbuttersäure (*C.* 1904 [1] 480).
- $C_4H_5O_2N$  \*7) Succinimid. Sm.  $125^\circ$ . Salze siehe (*Ph. Ch.* 42, 703 *C.* 1903 [1] 754; *J. pr.* [2] 69, 17 *C.* 1904 [1] 640; *B.* 37, 1479 *C.* 1904 [1] 1331).  
\*8) Nitril d. Acetoxylessigsäure. Sd.  $179-180^\circ_{755}$  (*C.* 1904 [2] 1377).
- $C_4H_5O_2N_3$  \*3) 4-Oximido-5-Keto-3-Methyl-4,5-Dihydropyrazol  $+ H_2O$ . Sm.  $230^\circ$  u. Zers. ( $232^\circ$ ). Ag, Methylpyrazolonsalz (*A.* 328, 66 *C.* 1903 [2] 249; *G.* 34 [1] 210 *C.* 1904 [1] 1486; *G.* 34 [1] 180 *C.* 1904 [1] 1332; *B.* 37, 2832 *C.* 1904 [2] 642; P. GUTTMANN, Dissert., Heidelberg 1903).  
13) 5-Oxy-4-Acetyl-1,2,3-Triazol. Sm.  $128-129^\circ$  u. Zers. (*A.* 325, 154 *C.* 1903 [1] 644).  
14) 5-Methyl-1,2,3-Triazol-4-Carbonsäure  $+ H_2O$ . Sm.  $235^\circ$  u. Zers. (*A.* 325, 153 *C.* 1903 [1] 644).
- $C_4H_5O_3N_3$  \*2) 5-Amido-2,4,6-Triketohexahydro-1,3-Diazin. K,  $K_2 + 2H_2O$ , Na, Ba (*A.* 333, 71 *C.* 1904 [2] 826).  
6) 4-Nitro-5-Keto-3-Methyl-4,5-Dihydropyrazol. Sm.  $276^\circ$  (*G.* 34 [1] 186 *C.* 1904 [1] 1332).  
7) 1-Oxy-4,5-Dihydro-1,2,3-Triazol-4-Methylen-carbonsäure. Sm. 184 bis  $185^\circ$ . Ba  $+ H_2O$  (*B.* 36, 4256 *C.* 1904 [1] 359).  
8) 1-Oxy-5-Methyl-1,2,3-Triazol-4-Carbonsäure  $+ H_2O$ . Zers. bei  $205^\circ$ .  $Ag_2$  (*A.* 325, 164 *C.* 1903 [1] 645).
- $C_4H_5O_3Cl$  \*2) Chlorid d. Oxalsäuremonoäthylester. Sd.  $133-135^\circ_{760}$  (*B.* 37, 3678 *C.* 1904 [2] 1495).  
3) Chlorid d. Acetoxylessigsäure. Sd.  $147-160^\circ$  u. Zers. ( $54^\circ_{11}$ ) (*B.* 36, 467 *C.* 1903 [1] 626).
- $C_4H_5O_4N_3$  \*1) 1-Nitro-2,4-Diketo-3-Methyltetrahydroimidazol. Sm.  $168^\circ$  (*A.* 327, 377 *C.* 1903 [2] 661).  
7) Säure (aus Uramil). K  $+ \frac{1}{2}H_2O$  (*A.* 333 88 *C.* 1904 [2] 828).
- $C_4H_5O_4Br$  \*2) i-Brombernsteinsäure. Dichinaldinsalz (*C. r.* 137, 1064 *C.* 1904 [1] 262; *B.* 37, 2598 *C.* 1904 [2] 421).
- $C_4H_5O_5N$  5) Amidooxybernsteinsäure. Sm.  $320^\circ$  (*B.* 37, 1596 *C.* 1904 [1] 1449).  
6) Oximidomalonmethylläthersäure. Sm.  $90-91^\circ$ .  $Ag_2 + \frac{1}{2}H_2O$  (*M.* 25, 110 *C.* 1904 [1] 1553).
- $C_4H_5O_5N_3$  2) Säure (aus Nitroessigsäureamid). Sm.  $101^\circ$  u. Zers. Ag (*M.* 25, 738 *C.* 1904 [2] 1111).
- $C_4H_5O_6Br$  \*1) Bromäpfelsäure. Monochinaldinsalz (*C. r.* 137, 1065 *C.* 1904 [1] 262).  
 $C_4H_5O_6N$  C 26,8 — H 2,8 — O 62,6 — N 7,8 — M. G. 179.  
1)  $\beta$ -Nitro- $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure (Nitroäpfelsäure). Ba<sub>2</sub> (*Am.* 32, 237 *C.* 1904 [2] 1141).  
2) Nitrat d. Oxyacetoxylessigsäure. Fl. (*Bl.* [3] 29, 678 *C.* 1903 [2] 488).

- $C_4H_5O_7N$  3) Nitrat d. Aepfelsäure. Sm. 115° u. Zers. (*Bl.* [3] 29, 679 *C.* 1903 [2] 488).  
 $C_4H_5O_7N_3$  O 23,2 — H 2,4 — O 54,1 — N 20,3 — M. G. 207.  
 1) Verbindung +  $\frac{3}{4}H_2O$  (aus Nitroessigsäureamid) (*M.* 25, 717 *C.* 1904 [2] 1110).  
 $C_4H_5NBr_2$  2) Nitril d.  $\beta\gamma$ -Dibrombuttersäure. Sd. 124—126° (*C. r.* 136, 1265 *C.* 1903 [2] 106; *C. r.* 137, 262 *C.* 1903 [2] 657).  
 $C_4H_5N_3S_2$  \*2) Chrysean (*B.* 36, 3546 *C.* 1903 [2] 1378).  
 $C_4H_5N_4Cl$  1) 6-Chlor-2,4-Diamido-1,4-Diazin. Sm. 198° (*B.* 36, 2232 *C.* 1903 [2] 449).  
 $C_4H_5N_4J$  1) 6-Jod-2,4-Diamido-1,3-Diazin. Sm. 187—188° (*B.* 36, 2233 *C.* 1903 [2] 449).  
 $C_4H_5ON_2$  \*8) Amid d.  $\alpha$ -Cyanpropionsäure. Sm. 105° (105—106°; 81°P) (*C.* 1903 [2] 192, 713).  
 \*14) 2,5-Dimethyl-1,3,4-Oxdiazol. Sd. 178—179° (*J. pr.* [2] 69, 150 *C.* 1904 [1] 1274).  
 $C_4H_5ON_4$  \*1) 4-Imido-2-Keto-6-Methyl-1,2,3,4-Tetrahydro-1,3,5-Triazin. Pikrat (*G.* 34 [2] 76 *C.* 1904 [2] 716).  
 8) Diamidooxy-1,3-Diazin (*H.* 38, 176 *C.* 1903 [1] 1417).  
 9) 4,6-Diamido-2-Keto-1,2-Dihydro-1,3-Diazin. Sm. noch nicht bei 347°. 2HCl, Pikrat (*Am.* 32, 349 *C.* 1904 [2] 1414).  
 $C_4H_5OCl_2$  \*2) Aethyläther d.  $\beta\beta$ -Dichlor- $\alpha$ -Oxyäthen. Sd. 144—146° (*C.* 1903 [1] 13; *G.* 33 [2] 383 *C.* 1904 [1] 921).  
 $C_4H_5O_2N_2$  \*3) 2,4-Diketo-3-Methyltetrahydroimidazol. Sm. 181—182°. Ag (*A.* 333, 113 *C.* 1904 [2] 893).  
 \*4) Laktylharnstoff. Sm. 148° (145°) (*Am.* 28, 394 *C.* 1903 [1] 90; *A.* 327, 383 *C.* 1903 [2] 661).  
 \*6) Glycinanhydrid. Ag<sub>2</sub> (*B.* 37, 1289 *C.* 1904 [1] 1336; *B.* 37, 2501 *C.* 1904 [2] 426).  
 \*9) Methylester d.  $\alpha$ -Diazopropionsäure. Sd. 43—45°<sub>11</sub> (*B.* 37, 1270 *C.* 1904 [1] 1334).  
 20) 2-Oxy-5-Keto-1-Methyl-4,5-Dihydroimidazol. Sm. 171° (*A.* 327, 375 *C.* 1903 [2] 661).  
 $C_4H_5O_2N_4$  8) 5,6-Diamido-2,4-Diketo-1,2,3,4-Tetrahydro-1,3-Diazin. H<sub>2</sub>SO<sub>4</sub> + 1½H<sub>2</sub>O (D.R.P. 144761 *C.* 1903 [2] 859).  
 9) 1-Amido-5-Methyl-1,2,3-Triazol-4-Carbonsäure. Sm. 190° u. Zers. (*B.* 36, 3616 *C.* 1903 [2] 1381).  
 $C_4H_5O_2Cl_2$  \*12)  $\beta\gamma$ -Dichlorbuttersäure (*C. r.* 138, 1051 *C.* 1904 [1] 1482).  
 $C_4H_5O_2Br_2$  \*14)  $\beta\gamma$ -Dibrombuttersäure. Sm. 49—50° (*C. r.* 136, 1266 *C.* 1903 [2] 106; *C. r.* 138, 1051 *C.* 1904 [1] 1482).  
 $C_4H_5O_2F_2$  1) Aethylester d. Difluoreessigsäure. Sd. 99,2° (*C.* 1903 [2] 710).  
 2)  $\beta\beta$ -Difluoräthylester d. Essigsäure. Sd. 106° (*C.* 1903 [1] 437).  
 $C_4H_5O_3N_4$  \*1) Allantoin (5-Ureido-2,4-Diketotetrahydroimidazol). Sm. 230—232°. K (*C. r.* 138, 426 *C.* 1904 [1] 792; *II.* 41, 342 *C.* 1904 [1] 1338; *A.* 333, 133 *C.* 1904 [2] 895).  
 $C_4H_5O_4N_2$  \*5) Methyloxalursäure. Sm. 177—178° (*A.* 327, 263 *C.* 1903 [2] 349; *A.* 333, 126 *C.* 1904 [2] 894).  
 7) Methylderivat d.  $\alpha$ -Verb. C<sub>3</sub>H<sub>4</sub>O<sub>4</sub>N<sub>2</sub> (*M.* 25, 101 *C.* 1904 [1] 1553).  
 8) Methylderivat d.  $\beta$ -Verb. C<sub>3</sub>H<sub>4</sub>O<sub>4</sub>N<sub>2</sub> (*M.* 25, 102 *C.* 1904 [1] 1553).  
 9) Monoamid d. Oximidomalonmethyläthersäure. Sm. 137—138° u. Zers. Ag (*M.* 25, 107 *C.* 1904 [1] 1553).  
 $C_4H_5O_5N_2$  \*4) Aethylester d. Oximidonitroessigsäure. Sm. 61° u. Zers. (*Bl.* [3] 31, 679 *C.* 1904 [2] 195).  
 5) Ureidomalonensäure. Sm. 148—150° u. Zers. (NH<sub>4</sub>)<sub>2</sub> + H<sub>2</sub>O, Ba + H<sub>2</sub>O, Pb + H<sub>2</sub>O (*A.* 333, 80 *C.* 1904 [2] 827).  
 $C_4H_5O_6N_2$  C 27,0 — H 3,4 — O 53,9 — N 15,7 — M. G. 178.  
 1) Aethylester d. Dinitroessigsäure. Fl (*C. r.* 136, 159 *C.* 1903 [1] 501).  
 $C_4H_5O_8Cr$  1) Gem. Anhydrid d. Essigsäure u. Chromsäure (*B.* 36, 2218 *C.* 1903 [2] 420).  
 $C_4H_5NBr$  \*1) Nitril d.  $\gamma$ -Brombuttersäure. Sd. 91°<sub>12</sub> (*Am.* 30, 161 *C.* 1903 [2] 712).  
 $C_4H_5N_2S$  \*9) 2,5-Dimethyl-1,3,4-Thiodiazol. Sm. 64°; Sd. 202—203° (*J. pr.* [2] 69, 152 *C.* 1904 [1] 1274).

- $C_4H_6N_2S_2$  1) Dimethyläther d.  $\alpha$ -Cyanimido- $\alpha\alpha$ -Dimerkaptomethan. Sm. 57° (A. 331, 285 C. 1904 [2] 31).  
 $C_4H_6N_2S_3$  5) Dimethyläther d. 3,5-Dimerkaptto-1,2,4-Thiodiazol (Dimethylper-sulfocyanat). Sm. 42°; Sd. 279° (A. 331, 292 C. 1904 [2] 32).  
 $C_4H_6N_2Se$  2) 2,5-Dimethyl-1,3,4-Selendiazol. Sm. 77°. +  $AgNO_3$  (J. pr. [2] 69, 509 C. 1904 [2] 601).  
 $C_4H_6N_4S$  2) 4,6-Diamido-2-Merkapto-1,3-Diazin +  $1\frac{1}{2}H_2O$ . Sm. noch nicht bei 280° (A. 331, 80 C. 1904 [1] 1200).  
 $C_4H_7ON$  \*5) Nitril d.  $\alpha$ -Oxyisobuttersäure (D.R.P. 141509 C. 1903 [1] 1244).  
 $C_4H_7ON_3$  8) Amid d. 4,5-Dihydropyrazol-1-Carbonsäure. Sm. 171° (A. 335, 211 C. 1904 [2] 1202).  
 $C_4H_7OCl_3$  \*2)  $\alpha\alpha\alpha$ -Trichlor- $\beta$ -Oxy- $\beta$ -Methylpropan +  $\frac{1}{2}H_2O$  (C. 1904 [1] 1643).  
\*4) Aethyläther d.  $\alpha\beta\beta$ -Trichlor- $\alpha$ -Oxyäthan. S. 170—175° (G. 33 [2] 376 C. 1904 [1] 921).  
 $C_4H_7OBr_3$  \*2)  $\alpha\alpha\alpha$ -Tribrom- $\beta$ -Oxy- $\beta$ -Methylpropan +  $\frac{1}{2}H_2O$  (C. 1904 [1] 1643).  
 $C_4H_7O_2N$  \*2)  $\gamma$ -Oximido- $\beta$ -Ketobutan. Sd. 83° (Bl. [3] 31, 1165 C. 1904 [2] 1700).  
 $C_4H_7O_2N_3$  9) 3,5-Dioxy-6-Methyl-1,6-Dihydro-1,2,4-Triazin. Na (Am. 28, 398 C. 1903 [1] 90).  
 $C_4H_7O_2Br$  \*8) Aethylester d. Bromessigsäure. Sd. 158,2°<sub>760</sub> (B. 36, 291 C. 1903 [1] 581).  
 $C_4H_7O_3N$  \*1)  $\alpha$ -Oximidobuttersäure. Sm. 169—170° u. Zers. (Bl. [3] 31, 1071 C. 1904 [2] 1457).  
\*3) Methylester d.  $\alpha$ -Oximidopropionsäure. Sm. 68—69°; Sd. 122—123°<sub>14</sub> (Bl. [3] 31, 1070 C. 1904 [2] 1457).  
\*4) Aethylester d. Oximidoessigsäure. Sm. 35°; Sd. 110—115°<sub>15</sub> (Bl. [3] 31, 675 C. 1904 [2] 195).  
 $C_4H_7O_3N_3$  15) Amid d. Acetoxylessigsäure. Sm. 93—95° (B. 36, 468 C. 1903 [1] 626).  
4) Amid d. Oximidomalonmethyläthersäure. Sm. 143—144,5° (M. 25, 72, 80 C. 1904 [1] 1552).  
 $C_4H_7O_4N$  \*4) l-Asparaginsäure (H. 38, 114 C. 1903 [1] 1423; H. 42, 207 C. 1904 [2] 961; Ph. Ch. 47, 615 C. 1904 [1] 1254).  
\*9) Aethylester d. Nitroessigsäure. Sd. 95—98°<sub>12</sub>. K (Bl. [3] 31, 850 C. 1904 [2] 640).  
 $C_4H_7O_4N_5$  3)  $\alpha$ -Nitro- $\alpha$ -Nitroso- $\beta$ -Semicarbazonpropan. Sm. 163—164° (C. 1903 [2] 1432).  
 $C_4H_7O_4P$  1) Phosphit d. Erythran. Sm. 117° (C. r. 136, 1068 C. 1903 [1] 1297).  
 $C_4H_7O_5N$  5)  $\alpha$ -Nitro- $\beta$ -Oxybuttersäure. Sm. 119—121° (C. 1903 [2] 554).  
6) Amidooxybernsteinsäure. Cu +  $4H_2O$  (H. 42, 285 C. 1904 [2] 958).  
7) Nitrat d.  $\alpha$ -Oxybuttersäure. Sm. 45° (C. r. 137, 1263 C. 1904 [1] 434).  
8) Nitrat d.  $\beta$ -Oxybuttersäure. Fl. (Bl. [3] 31, 245 C. 1904 [1] 1067).  
9) Nitrat d.  $\alpha$ -Oxyisobuttersäure. Sm. 78° (Bl. [3] 31, 246 C. 1904 [1] 1067).  
 $C_4H_7NF_4$  1) Di[ $\beta\beta$ -Difluoräthyl]amin. Sd. 124,4°<sub>755</sub> HCl,  $H_2SO_4$ , Oxalat (C. 1904 [2] 945).  
 $C_4H_7N_3S$  2) 4,5,6-Triamido-2-Merkapto-1,3-Diazin +  $\frac{1}{2}H_2O$  (A. 331, 82 C. 1904 [1] 1200).  
 $C_4H_8OS$  \*4)  $\alpha$ -Acetyl- $\beta$ -Oxy- $\beta$ -Methylpropan +  $H_2S$ . Sm. 61° (C. 1904 [2] 21).  
 $C_4H_8O_2N_2$  \*1)  $\alpha$ -Acetyl- $\beta$ -Oxy- $\beta$ -Methylpropan +  $H_2S$ . Sm. 61° (Am. 30, 419 C. 1904 [1] 241).  
\*15) s-Dimethylamid d. Oxalsäure. Sm. 209—210° (210—212°) (A. 327, 262 C. 1903 [2] 349; B. 37, 2200 C. 1904 [2] 323).  
\*20) s-Diacetylhydrazin. Sm. 138°; Sd. 209°<sub>15</sub>. Cu (J. pr. [2] 69, 145 C. 1904 [1] 1274).  
25) Methyläther d.  $\alpha$ -Amido- $\alpha$ -Acetylrimido- $\alpha$ -Oxymethan (O-Methyl-acetylisoharnstoff). Sm. 58,5°. Ag (C. 1904 [1] 1560).  
26) Propionylharnstoff. Sm. 209° (D.R.P. 147278 C. 1904 [1] 68).  
 $C_4H_8O_2N_4$  10)  $\alpha$ -Oximido- $\beta$ -Semicarbazonpropan. Sm. 219—220° (C. 1903 [2] 1432).  
 $C_4H_8O_2Cl_2$  \*2) Monoäthyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dioxyäthan. Sd. 109—111° (G. 33 [2] 402 C. 1904 [1] 922).  
3) Dimethyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dioxyäthan. Sd. 166—168° (G. 33 [2] 415 C. 1904 [1] 922).  
 $C_4H_8O_3N_2$  \*8) Aethylester d. Methylnitrosamidoameisensäure. Sd. 65—65,5°<sub>13</sub> (B. 36, 2478 C. 1903 [2] 559; B. 36, 3636 C. 1903 [2] 1331; B. 36, 4295 C. 1904 [1] 507).  
\*9) Aethylester d. Allophansäure. Sm. 192° (B. 36, 743 C. 1903 [1] 827).

- $C_4H_5O_3N_2$  \*11)  $\alpha$ -Amid d.  $\alpha$ -Amidoäthan- $\alpha\beta$ -Dicarbonsäure (*G.* 34 [2] 44 *C.* 1904 [2] 825).  
 \*12) d-Asparagin (*G.* 34 [2] 36 *C.* 1904 [2] 825).  
 \*13) l-Asparagin (*Ph. Ch.* 47, 611 *C.* 1904 [1] 1254; *G.* 34 [2] 36 *C.* 1904 [2] 825).  
 \*20) Diamid d. l- $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 157° (*Soc.* 83, 1325 *C.* 1904 [1] 82).  
 23) Aethylester d. Amidooximidoessigsäure. Sm. 97—98° (*Soc.* 81, 1575 *C.* 1903 [1] 158).  
 24) Amid d. Oximidooxyessig-N-Aethyläthersäure. Sm. 178° (*Soc.* 81, 1566 *C.* 1903 [1] 157).  
 25) Hydroxylamid d. Aethylloxaminsäure. Sm. 138°. Hydroxylaminsalz (*Soc.* 81, 1572 *C.* 1903 [1] 158).
- $C_4H_5O_4N_2$  \*1)  $\alpha\alpha$ -Dinitrobutan. K (*J. pr.* [2] 67, 139 *C.* 1903 [1] 865; *G.* 33 [1] 415 *C.* 1903 [2] 551).  
 \*18) Amid d. d-Weinsäure. Sm. 195° u. Zers. (*Soc.* 83, 1354 *C.* 1904 [1] 84).
- $C_4H_5O_4N_4$  \*1) Diureidoessigsäure (Allantoinsäure). Zers. bei 165° (*C. r.* 138, 426 *C.* 1904 [1] 792).
- $C_4H_5O_5Cr$  1) Gem. Anhydrid d. Buttersäure u. Chromsäure (*B.* 36, 2218 *C.* 1902 [2] 420).
- $C_4H_5N_2S_4$  \*2) Dimethyläther d. Di[Imidomerkaptomethyl]disulfid (*B.* 36, 2266 *C.* 1903 [2] 562).
- $C_4H_5ON$  \*4)  $\beta$ -Oximidobutan. Sm. 152—153° (*C.* 1903 [2] 1415; *M.* 25, 337 *C.* 1904 [1] 1400).  
 18)  $\beta$ -Nitroso- $\beta$ -Methylpropan. Sm. 76—76,5° (u. Druck) (*B.* 36, 686 *C.* 1903 [1] 817).  
 19)  $\alpha$ -Amido- $\beta$ -Ketobutan. (2HCl, PtCl<sub>4</sub>) (*B.* 37, 2475 *C.* 1904 [2] 418).
- $C_4H_5ON_3$  3)  $\alpha$ -Semicarbazonpropan. Sm. 88—90° (*A.* 335, 202 *C.* 1904 [2] 1201).  
 4) isom.  $\alpha$ -Semicarbazonpropan. Sm. 154° (*A.* 335, 202 *C.* 1904 [2] 1201).  
 5) Propionylguanidin. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*Ar.* 241, 475 *C.* 1903 [2] 989).
- $C_4H_5O_2N$  \*4)  $\beta$ -Nitro- $\beta$ -Methylpropan. Fl. (*B.* 36, *C.* 1903 [1] 817).  
 \*10) i- $\alpha$ -Amidobuttersäure. (*C.* 1903 [2] 554).  
 \*11)  $\beta$ -Amidobuttersäure. Sm. 156° (*J. pr.* [2] 70, 204 *C.* 1904 [2] 1459).  
 \*14)  $\alpha$ -Amidoisobuttersäure (*B.* 37, 1923 *C.* 1904 [2] 196).  
 \*22) Aethylester d. Amidoessigsäure. HCl (*A.* 327, 365 *C.* 1903 [2] 660).  
 \*23) Aethylester d. Methylamidoameisensäure. Sd. 79,8—80,6°<sub>145</sub> (*B.* 36, 2476 *C.* 1903 [2] 559).  
 34)  $\alpha$ -Oximido- $\alpha$ -Oxybutan (Butyrhydroxamsäure). Sm. 127° (*G.* 34 [1] 432 *C.* 1904 [2] 511).
- $C_4H_5O_2N_3$  \*10)  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Zers. bei 195—200° (*A.* 335, 213 *C.* 1904 [2] 1202).  
 12) Aethylamidoformylharnstoff. Sm. 153° (*Soc.* 81, 1572 *C.* 1903 [1] 158).  
 13)  $\gamma$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 114° (*A.* 335, 220 *C.* 1904 [2] 1203).
- $C_4H_5O_2Cl$  5)  $\alpha$ -Methyläther d.  $\beta$ -Chlor- $\alpha$ - $\gamma$ -Dioxypropan. Sd. 172—173°<sub>737</sub> (*C.* 1904 [2] 303).
- $C_4H_5O_3N$  \*10)  $\alpha$ -Oxamidobuttersäure. Sm. 144° (*B.* 36, 4317 *C.* 1904 [1] 449).  
 20)  $\alpha$ -Amido- $\beta$ -Oxybuttersäure +  $\frac{1}{2}H_2O$ . Sm. 229—230° u. Zers. NH<sub>4</sub>, HCl (*C.* 1903 [2] 554).  
 21)  $\beta$ -Amido- $\alpha$ -Oxyisobuttersäure. Sm. 276° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>) (*C.* 1903 [2] 555).
- $C_4H_5O_3N_3$  \*1)  $\alpha$ -Semicarbazidopropionsäure (*Ann.* 28, 399 *C.* 1903 [1] 90).  
 3) Aethylester d. Semicarbazidoameisensäure. Sm. 126° (P. GUTMANN, Dissert. Heidelberg 1903).
- $C_4H_5O_5N$  2) Gem. Anhydrid d. Essigsäure u. Orthosalpetersäure. Hg, Ag<sub>2</sub> (*C.* 1903 [2] 419).
- $C_4H_5O_5P$  2) Monophosphit d. Erythran. Ca + H<sub>2</sub>O (*C. r.* 136, 1068 *C.* 1903 [1] 1297).
- $C_4H_5O_6P$  1) Säure (aus Erythrit) (*C. r.* 136, 457 *C.* 1903 [1] 695).
- $C_4H_5O_7N$  \*1) Diacetylsalpetersäure (*C.* 1903 [2] 1108).

- $C_4H_9NS_2$  \*4) Isopropylester d. Amidodithioameisensäure. Sm. 97° (C. r. 135, 975 C. 1903 [1] 139).  
 \*5) Methylester d. Dimethylamidodithioameisensäure (C. r. 136, 452 C. 1903 [1] 699).  
 7) Methylenäther d. Methyldi[Merkaptomethyl]amin (C. r. 136, 452 C. 1903 [1] 699).  
 8) Propylester d. Amidodithioameisensäure. Sm. 57° (58°) (C. 1903 [1] 962; C. r. 135, 975 C. 1903 [1] 139).
- $C_4H_{10}ON_2$  \*14) Hydrazid d. Buttersäure. Sm. 44°. HCl (J. pr. [2] 69, 486 C. 1904 [2] 599).  
 15) 4-Amidomorpholin (Morpholyhydrazin). Sd. 168°<sub>707</sub>. HCl (B. 35, 4474 C. 1903 [1] 404).  
 16) Hydrazid d. Isobuttersäure. Sm. 104° (J. pr. [2] 69, 497 C. 1904 [2] 600).
- $C_4H_{10}O_4N_4$  \*4) Dihydrazid d. d-Weinsäure (Soc. 83, 1363 C. 1904 [1] 84).  
 $C_4H_{10}O_4S$  \*6) Diäthylester d. Schwefelsäure. ( $Fe_2O_3$ ,  $3SO_3 + 4H_2O$ ) (C. r. 137, 189 C. 1903 [2] 613).
- $C_4H_{10}O_6P_2$  1) Verbindung (aus d. Verb.  $C_4H_8O_4Cl_2P_2$ ) (C. r. 136, 757 C. 1903 [1] 1017).
- $C_4H_{10}NCl$  7)  $\beta$ -Chlor- $\alpha$ -Dimethylamidoäthan. Sd. 109—110°<sub>750</sub>. HCl, (HCl,  $AuCl_3$ ) (B. 37, 3508 C. 1904 [2] 1322).
- $C_4H_{10}NBr$  \*1)  $\beta$ -Brom- $\alpha$ -Amidobutan. Pikrat (B. 37, 2482 C. 1904 [2] 420).  
 $C_4H_{10}ClTl$  \*1) Thalliumdiäthylechlorid. Zers. bei 205—206° (B. 37, 2057 C. 1904 [2] 20).
- $C_4H_{10}Cl_2Si$  \*1) Siliciumdiäthylchlorid (C. 1904 [1] 636).  
 $C_4H_{10}BrTl$  1) Thalliumdiäthylbromid. Zers. oberh. 270° (B. 37, 2057 C. 1904 [2] 20).
- $C_4H_{10}JTl$  \*1) Thalliumdiäthyljodid. Zers. bei 185—187° (B. 37, 2057 C. 1904 [2] 20).
- $C_4H_{11}ON$  \*2)  $\beta$ -Dimethylamido- $\alpha$ -Oxyäthan. (HCl,  $AuCl_3$ ) (B. 37, 3496 C. 1904 [2] 1320).  
 \*5) Diäthylhydroxylamin. Sd. 76°<sub>93</sub>. HCl, Oxalat (B. 36, 2316 C. 1903 [2] 421).  
 \*11)  $\alpha$ -Amido- $\beta$ -Oxybutan. Sd. 168,5—170°<sub>774</sub> (B. 37, 2479 C. 1904 [2] 419).  
 12)  $\beta$ -Amidodiäthyläther. Sd. 108—109°<sub>750</sub>. (HCl,  $AuCl_3$ ) (B. 37, 3506 C. 1904 [2] 1321).  
 13)  $\beta$ -Hydroxylamido- $\beta$ -Methylpropan (tert. Butylhydroxylamin) (B. 36, 685 C. 1903 [1] 817).
- $C_4H_{11}ON_3$  2)  $\alpha$ -Amido- $\alpha$ -Methyl- $\beta$ -Aethylharnstoff. HCl (B. 37, 2324 C. 1904 [2] 312).
- $C_4H_{11}OTl$  \*1) Thalliumdiäthylhydroxyd. Sm. 127—128°. Salze siehe (B. 37, 2058 C. 1904 [2] 20).
- $C_4H_{11}O_2N$  \*1)  $\beta$ -Amido- $\alpha\gamma$ -Dioxy- $\beta$ -Methylpropan. HCl, (2HCl,  $PtCl_4$ ) (C. 1903 [1] 816).
- $C_4H_{11}O_3P$  \*1) Diäthylester d. Phosphorigen Säure. Sd. 184—186° (C. 1903 [2] 22).  
 3) Methyläthylcarbinolunterphosphorigesäure. Pb, Cu +  $H_2O$ , Ag (C. r. 136, 234 C. 1903 [1] 563; C. 1904 [2] 1708).
- $C_4H_{11}O_4P$  5) Methyläthylcarbinolphosphinsäure. Sm. 158—159°.  $Ag_2$  (C. r. 136, 235 C. 1903 [1] 564; C. 1904 [2] 1708).
- $C_4H_{11}O_6P$  1) Phosphit d. Erythrit. (Erythrophosphorige Säure) (C. r. 136, 1068 C. 1903 [1] 1296).
- $C_4H_{11}N_3S$  \*1)  $\alpha$ -Amido- $\alpha$ -Methyl- $\beta$ -Aethylthioharnstoff (B. 37, 2320 Anm. C. 1904 [2] 311).
- $C_4H_{11}ClS$  \*1) Dimethyläthylsulfinchlorid (J. pr. [2] 66, 454 C. 1903 [1] 561).  
 $C_4H_{11}STl$  1) Thalliumdiäthylsulfhydrat (B. 37, 2057 C. 1904 [2] 20).  
 $C_4H_{12}ON_2$  3)  $\alpha$ -Amido- $\beta$ -[ $\beta$ -Oxyäthyl]amidoäthan. Sd. 238—240°<sub>752</sub> (2HCl,  $PtCl_4$ ) (B. 35, 4470 C. 1903 [1] 403).  
 C 40,0 — H 10,0 — O 26,7 — N 23,3 — M. G. 120.
- $C_4H_{12}O_2N_2$  1)  $\alpha\alpha$ -Di[ $\beta$ -Oxyäthyl]hydrazin. Sd. 188—190°<sub>25</sub> (B. 35, 4474 C. 1903 [1] 404).
- $C_4H_{12}NCl$  \*1) Tetramethylammoniumchlorid. +  $6HgCl_2$  (J. pr. [2] 66, 468 C. 1903 [1] 561).

- $C_4H_{11}NJ_6$  1) Tetramethylammoniumenneajodid. Sm. 108° (*J. pr.* [2] 67, 348 *C.* 1903 [1] 1297).
- $C_4H_9ClP$  \*1) Tetramethylphosphoniumchlorid (*C. r.* 139, 598 *C.* 1904 [2] 1451).
- $C_4H_9JP$  \*1) Tetramethylphosphoniumjodid. +  $J_2$  (*C. r.* 139, 598 *C.* 1904 [2] 1451).
- $C_4H_8O_6N_4$  1) Verbindung (aus Dimethylviolursäure). Sm. 239—240° u. Zers. (*Soc.* 83, 23 *C.* 1903 [1] 448).

## — 4 IV —

- $C_4HNCIBr_3$  1) Chlortribrompyrrol. Sm. 96—100° u. Zers. (*G.* 32 [2] 315 *C.* 1903 [1] 587).
- $C_4HNCIBr_2$  1) Dichlordibrompyrrol. Sm. 100° (*G.* 32 [2] 317 *C.* 1903 [1] 587).
- $C_4HNCIBr$  1) 2, 3, 5-Trichlor-4-Brompyrrol. Zers. bei 115° (*G.* 34 [2] 178 *C.* 1904 [2] 994).
- $C_4H_2O_2NCl$  \*2) Imid d. Chlormaleinsäure. Sm. 130° (*G.* 34 [1] 416 *C.* 1904 [2] 452).
- $C_4H_2O_2N_3S$  3) 1,2,3-Thiodiazol-4,5-Dicarbonsäure +  $H_2O$ . Sm. 98° (oberh. 110° wasserfrei) (*A.* 333, 8 *C.* 1904 [2] 780).
- $C_4H_3O_2NCl_4$  1) Gem. Imid d. Chloressigsäure u. Trichloressigsäure. Sm. 80° (*J. pr.* [2] 69, 13 *C.* 1904 [1] 639).
- $C_4H_3O_2N_2Br$  1) 5-Brom-2,4-Diketo-1,2,3,4-Tetrahydro-1,3-Diazin (Bromuracil). Sm. 293° (*Am.* 29, 486 *C.* 1903 [1] 1309).
- $C_4H_3O_3NBr_2S$  1) Amid d. 2,5-Dibromfuran-3-Sulfonsäure. Sm. 153,5°. K, Ag (*Am.* 32, 227 *C.* 1904 [2] 1140).
- $C_4H_3O_7NHg_3$  1) Verbindung (aus d. Verb.  $C_6H_5O_5Hg_3$ ) (*B.* 36, 3708 *C.* 1903 [2] 1240).
- $C_4H_4ON_2S_3$  \*1) 5-Acetylrimido-3-Thiocarbonyl-4,5-Dihydro-1,2,4-Dithiazol (Acetylisopersulfocycansäure) (*A.* 331, 295 *C.* 1904 [2] 32).
- $C_4H_4ON_3Cl$  1) 6-Chlor-4-Amido-2-Keto-1,2-Dihydro-1,3-Diazin. Sm. noch nicht bei 300° (*Am.* 32, 348 *C.* 1904 [2] 1414).
- $C_4H_4ON_3Br$  1) 5-Brom-4-Amido-2-Keto-1,2-Dihydro-1,3-Diazin. Zers. oberh. 235° (*Am.* 31, 604 *C.* 1904 [2] 243).
- 2) 5-Brom-2-Amido-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 273° u. Zers. (*Am.* 29, 504 *C.* 1903 [1] 1311).
- $C_4H_4ON_3J$  1) 6-Jod-2-Amido-4-Oxy-1,3-Diazin. Zers. bei 241° (*B.* 36, 2230 *C.* 1903 [2] 448).
- $C_4H_4O_2NCl_3$  2) Gem. Imid d. Chloressigsäure u. Dichloressigsäure. Sm. 98° (*J. pr.* [2] 69, 12 *C.* 1904 [1] 639).
- $C_4H_4O_2N_3S$  4) 5-Methyl-1,2,3-Thiodiazol-4-Carbonsäure +  $H_2O$ . Sm. 75° (113° wasserfrei) (*A.* 325, 177 *C.* 1903 [1] 646; *A.* 333, 6 *C.* 1904 [2] 780).
- $C_4H_4O_2N_4S$  1) 5-Oximido-6-Imido-2-Thiocarbonyl-4-Ketohexahydro-1,3-Diazin +  $\frac{1}{2}H_2O$  (*A.* 331, 73 *C.* 1904 [1] 1200).
- $C_4H_4O_7N_3S$  1) 5-Oxy-2,4,6-Triketohexahydro-1,3-Diazin-5-Sulfonsäure (Alloxansulfit). ( $NH_4$ )<sub>2</sub>, K<sub>2</sub> +  $H_2O$ , Dimethylaminsalz (*A.* 333, 94 *C.* 1904 [2] 829).
- $C_4H_5ONS_2$  2) 2-Thiocarbonyl-4-Keto-3-Methyltetrahydrothiazol. Sm. 72° (*M.* 25, 167 *C.* 1904 [1] 894).
- $C_4H_5ON_3S$  4) 6-Amido-2-Thiocarbonyl-4-Keto-1,2,3,4-Tetrahydro-1,3-Diazin +  $H_2O$  (*A.* 331, 71 *C.* 1904 [1] 1199).
- $C_4H_5OCl_3Br_2$  \*1) Aethyläther d.  $\alpha\beta$ -Trichlor- $\alpha\beta$ -Dibrom- $\alpha$ -Oxyäthan. Sd. 124—129°<sub>25-30</sub> (*G.* 33 [2] 386 *C.* 1904 [1] 921).
- $C_4H_5O_2NCl_2$  1) Imid d. Chloressigsäure. Sm. 189° u. Zers. (195°) (*J. pr.* [2] 69, 11 *C.* 1904 [1] 639; *J. pr.* [2] 69, 353 *C.* 1904 [2] 510).
- $C_4H_5O_2N_3Se$  1) Selencyanacetylharnstoff. Sm. 178—179° u. Zers. (*Ar.* 241, 181 *C.* 1903 [2] 103).
- $C_4H_5O_6N_3S$  \*1) Thionursäure (*A.* 333, 98 *C.* 1904 [2] 829).
- $C_4H_5N_2Cl_2Br$  1) Verbindung (aus Chloressigsäurenitril u. HBr). Sm. 143° u. Zers. (*J. pr.* [2] 69, 356 *C.* 1904 [2] 510).
- $C_4H_5ONBr$  2) Nitril d.  $\gamma$ -Brom- $\beta$ -Oxybuttersäure. Sd. 149—150°<sub>12</sub> (*C. r.* 136, 1265 *C.* 1903 [2] 106).
- 3) Amid d.  $\gamma$ -Bromcrotonsäure. Sm. 110° (*C. r.* 138, 1050 *C.* 1904 [1] 1481).
- $C_4H_6ON_2F_4$  1) Di[ $\beta\beta$ -Difluoräthyl]nitrosamin. Sd. 178,6°<sub>755</sub> (*C.* 1904 [2] 945).

- $C_4H_5ON_2Se$  1) 2-Imido-4-Keto-5-Methyltetrahydroselenazol ( $\alpha$ -Methylselenhydantoin). Sm. 179° (*Ar.* 241, 197 *C.* 1903 [2] 103).  
 $C_4H_5ON_4S$  3) 5,6-Diamido-2-Thiocarbonyl-4-Keto-1,2,3,4-Tetrahydro-1,3-Diazin (*A.* 331, 74 *C.* 1904 [1] 1200).  
 $C_4H_5O_2NCl$  3) Gem. Imid d. Essigsäure u. Chloressigsäure. Sm. 105—106° (*J. pr.* [2] 69, 15 *C.* 1904 [1] 640).  
 $C_4H_5O_2ClBr$  3)  $\gamma$ -Chlor- $\beta$ -Brombuttersäure. Sm. 49—50° (*C. r.* 136, 1266 *C.* 1903 [2] 106; *C. r.* 138, 1051 *C.* 1904 [1] 1482).  
 $C_4H_5O_2BrF$  \*1) Aethylester der Bromfluoressigsäure. Sd. 154° (*C.* 1903 [1] 12).  
 $C_4H_5O_2JF$  1) Aethylester d. Jodfluoressigsäure. Sd. 180° u. ger. Zers. (*C.* 1903 [1] 13).  
 $C_4H_7ONBr_2$  3) Amid d.  $\beta\gamma$ -Dibrombuttersäure. Sm. 86° (*C. r.* 138, 1050 *C.* 1904 [1] 1481).  
 $C_4H_7ONS_2$  \*2) Methyl ester d. Acetylamidodithioameisensäure. Sm. 119° (*Bl.* [3] 29, 51 *C.* 1903 [1] 446).  
 $C_4H_7OClF_2$  1) Aethyläther d.  $\alpha$ -Chlor- $\beta\beta$ -Difluor- $\alpha$ -Oxyäthan. Sd. 90° (*C.* 1903 [1] 13).  
 $C_4H_7OCl_2F$  1) Aethyläther d.  $\beta\beta$ -Dichlor- $\alpha$ -Fluor- $\alpha$ -Oxyäthan. Sd. 121° (*C.* 1903 [1] 13).  
 $C_4H_7O_2NS$  \*1) Aethylester d. Thiooxaminsäure (*B.* 37, 3721 *C.* 1904 [2] 1450).  
 $C_4H_7O_2N_2Br$  1)  $\alpha$ -Brompropionylharnstoff. Sm. 162° (*Ar.* 241, 195 *C.* 1903 [2] 103).  
 $C_4H_7O_2BrHg$  1) Acetat d. Quecksilber- $\beta$ -Oxyäthylbromid. Sm. 75° (*A.* 329, 188 *C.* 1903 [2] 1414).  
 $C_4H_7N_4ClS$  3) Chlormethylat d. 5-Methyl-1,2,3-Thiodiazol. 2 +  $PtCl_4$ , +  $AuCl_3$  (*A.* 333, 17 *C.* 1904 [2] 781).  
 $C_4H_7N_4JS$  2) Jodmethylat d. 5-Methyl-1,2,3-Thiodiazol. Sm. 76—77° (*A.* 333, 16 *C.* 1904 [2] 781).  
 $C_4H_5ON_3S$  3) Methylhydroxyd d. 5-Methyl-1,2,3-Thiodiazol. Salze siehe (*A.* 333, 16 *C.* 1904 [2] 781).  
 $C_4H_5ON_3S_2$  2) Dimethyläther d. Dimerkaptomethylenharnstoff. Zers. bei 217° (*A.* 331, 288 *C.* 1904 [2] 31).  
 $C_4H_5O_2NCl$  4)  $\alpha$ -Chlor- $\beta$ -Nitro- $\beta$ -Methylpropan. Sd. 181—185° (*C.* 1904 [1] 1479).  
 $C_4H_5O_2N_2S$  \*2) Aethylester d. Thioharnstoffcarbonsäure (*Ar.* d. Thiopseudoallophanensäure).  $HCl$  (*Soe.* 83, 566 *C.* 1903 [1] 1123).  
 $C_4H_5O_4Cl_2P_2$  1) Verbindung (aus  $\alpha\beta$ -Dioxyäthan u.  $PCl_3$ ) (*C. r.* 136, 756 *C.* 1903 [1] 1017).  
 $C_4H_5O_2ClS$  \*2) Dimethylthetinchlorid. +  $6HgCl_2$  (*J. pr.* [2] 66, 465 *C.* 1903 [1] 561).  
 $C_4H_{10}NCl_2P$  \*1) Diäthylamidodichlorphosphin. Sd. 189° (*A.* 326, 154 *C.* 1903 [1] 761).  
 2) Isobutylamidodichlorphosphin. Sd. 101°<sub>10</sub> (*A.* 326, 150 *C.* 1903 [1] 760).  
 $C_4H_{10}NCl_4P$  1) Diäthylamidophosphortetrachlorid. +  $PCl_5$  (*A.* 326, 160 *C.* 1903 [1] 761).  
 $C_4H_{18}O_2N_2P$  1) Amid-Diäthylmonamid d. Phosphorsäure? Sm. 144° (*A.* 326, 191 *C.* 1903 [1] 820).
- 4 V —
- $C_4HO_2NClBr$  1) Imid d. Chlorbrommaleinsäure. Sm. 196° (*G.* 32 [2] 127 *C.* 1904 [2] 993).  
 $C_4H_5O_2NClBr$  1) Gem. Imid d. Chloressigsäure u. Bromessigsäure. Sm. 180° u. Zers. (*J. pr.* [2] 69, 14 *C.* 1904 [1] 640).  
 $C_4H_{10}ONCl_2P$  \*1) Diäthylmonamid d. Phosphorsäuredichlorid. Sd. 220° (*A.* 326, 181 *C.* 1903 [1] 819).  
 2) Isobutylmonamid d. Phosphorsäuredichlorid. Sd. 141°<sub>11</sub> (*A.* 326, 174 *C.* 1903 [1] 819).  
 $C_4H_{10}ONBr_2P$  1) Diäthylmonamid d. Phosphorsäuredibromid. Fl. (*A.* 326, 194 *C.* 1903 [1] 820).  
 $C_4H_{10}NCl_2SP$  \*1) Diäthylmonamid d. Thiophosphorsäuredichlorid. Sd. 107°<sub>14</sub> (*A.* 326, 211 *C.* 1903 [1] 822).  
 2) Isobutylmonamid d. Thiophosphorsäuredichlorid. Sd. 251° (*A.* 326, 204 *C.* 1903 [1] 821).

$C_4H_{10}NBr_2SP$  1) Diäthylmonamid d. Thiophosphorsäuredibromid. Fl. (A. 326, 216 C. 1903 [1] 822).

## — 4 VI —

$C_4H_8O_3NClBrS$  1) Amid d. 5-Chlor-2-Bromfuran-3-Sulfonsäure. Sm. 134—135° K, Ag (Am. 32, 216 C. 1904 [2] 1140).

**C<sub>5</sub>-Gruppe.**

- $C_5H_6$  \*1) Cyklopentadiën (B. 35, 4151 C. 1903 [1] 159).  
 5) polym. Cyklopentadiën (B. 35, 4152 C. 1903 [1] 159).  
 $C_5H_8$  \*7)  $\alpha\gamma$ -Pentadiën (C. 1904 [2] 183).  
 16)  $\beta\gamma$ -Pentadiën. Sd. 49—51° (C. 1904 [1] 577).  
 17) 1-Methylen-R-Tetramethylen? Sd. 43°<sub>727</sub> (C. 1903 [1] 828).  
 18) Kohlenwasserstoff (aus *Asclepias syriaca* L.) =  $(C_5H_8)_x$  (J. pr. [2] 68, 393 C. 1904 [1] 105).  
 $C_5H_{10}$  \*1)  $\alpha$ -Penten (G. 33 [1] 77 C. 1903 [1] 1109).  
 \*2)  $\beta$ -Penten (C. 1903 [2] 339).  
 \*4)  $\gamma$ -Methyl- $\alpha$ -Buten (B. 36, 2004 C. 1903 [2] 336).  
 \*5) Trimethyläthylen (B. 36, 2016 C. 1903 [2] 337).  
 \*8) 1,1-Dimethyl-R-Trimethylen (B. 36, 2015 C. 1903 [2] 337).

## — 5 II —

- $C_5H_4O_2$  \*2) 1,4-Pyron. HCl, 2 + (HCl, AuCl<sub>3</sub>), 3 + (HCl, AuCl<sub>3</sub>), Oxalat, 2 + CaCl<sub>2</sub>, + HgCl<sub>2</sub>, 4 + (AgNO<sub>3</sub>)<sub>7</sub>, + CH<sub>3</sub>OK, + C<sub>2</sub>H<sub>5</sub>ONa (B. 37, 3745 C. 1904 [2] 1538).  
 $C_5H_4O_3$  \*2) Isobrenzschleimsäure. Sm. 92°; Sd. 102°<sub>15</sub>. Hydroxylaminsalz, Phenylhydrazinsalz (Bl. (3) 29, 337 C. 1903 [1] 1217; C. r. 136, 50 C. 1903 [1] 443; Bl. [3] 29, 406 C. 1903 [1] 1302).  
 \*5) Anhydrid d. Itakonsäure (B. 37, 3969 C. 1904 [2] 1604).  
 $C_5H_5N$  \*1) Pyridin. Sd. 115,2°<sub>780</sub>. 2 + 3 HgCl<sub>2</sub> (Am. 29, 2 C. 1903 [1] 524; A. 326, 314 C. 1903 [1] 1088; C. r. 136, 1557 C. 1903 [2] 384; B. 37, 559 C. 1904 [1] 873).  
 $C_5H_5N_5$  \*1) Adenin + H<sub>2</sub>O (A. 331, 86 C. 1904 [1] 1200).  
 $C_5H_6O_3$  \*4) Anhydrid d. i-Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 32,5—34,5° (37°) Sd. 244—248° (238—240°) (C. 1903 [2] 288; Soc. 85, 542 C. 1904 [1] 1485).  
 7) Anhydrid d. r-Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 67—68° (C. 1903 [2] 288).  
 $C_5H_6O_4$  \*8) R-Trimethylen-1,1-Dicarbonsäure. Sm. 140—141° (Soc. 83, 1379 C. 1904 [1] 162, 437).  
 \*9) mal. (cis)-R-Trimethylen-1,2-Dicarbonsäure. Ag<sub>2</sub> (Soc. 83, 1379 C. 1904 [1] 162, 437).  
 \*10) fum. [trans]-R-Trimethylen-1,2-Dicarbonsäure. Sm. 175°, Ag<sub>2</sub> (Soc. 83, 1379 C. 1904 [1] 162, 437; B. 36, 3786 C. 1904 [1] 43; B. 37, 2105 C. 1904 [2] 104).  
 $C_5H_6O_5$  9) Methylenester d. Aepfelsäure (R. 21, 315 C. 1903 [1] 137).  
 $C_5H_6O_6$  4) Monoformal-d-Weinsäure. Sm. 160°. Ba + 2H<sub>2</sub>O (R. 21, 313 C. 1903 [1] 137).  
 5) Monoformal-l-Weinsäure. Sm. 159—161°. Ba + 2H<sub>2</sub>O (R. 21, 314 C. 1903 [1] 137).  
 6) Monoformal-i-Weinsäure. Sm. 135°. Ba (R. 21, 314 C. 1903 [1] 137).  
 7) Monoformaltraubensäure. Sm. 148°. Ba + 2H<sub>2</sub>O (R. 21, 314 C. 1903 [1] 137).  
 $C_5H_6N_2$  11) 2-Methyl-1,3-Diazin. Sm. —5°; Sd. 138°<sub>758</sub> (B. 37, 3642 C. 1904 [2] 1416).  
 $C_5H_7N$  \*1) 1-Methylpyrrol. Sd. 112—112,5°<sub>720</sub> (B. 37, 2792 C. 1904 [2] 531).  
 \*2) 2-Methylpyrrol. Sd. 144,5—145,5° (G. 33 [2] 267 C. 1904 [1] 40; B. 37, 2793 C. 1904 [2] 531).  
 $C_5H_7N_3$  4) 4-Amido-2-Methyl-1,3-Diazin. Sm. 205°. HNO<sub>3</sub> (B. 37, 3642 C. 1904 [2] 1416).

- $C_5H_8O$  \*7) Acetyl-R-Trimethylen (B. 36, 1379 C. 1903 [1] 1416; B. 36, 1795 C. 1903 [2] 282).
- $C_5H_8O_2$  \*1)  $\beta\gamma$ -Diketopentan. Sd.  $108^\circ$  (Bl. [3] 31, 1174 C. 1904 [2] 1701).
- \*2) Acetylaceton.  $SnCl_4$ -Verbindung.  $TiCl_4$ ,  $(FeCl_3, TiCl_4)$ ,  $(PtCl_4, TiCl_4)$  (B. 36, 929 C. 1903 [1] 1025; B. 36, 1834 C. 1903 [2] 191; B. 37, 589 C. 1904 [1] 867; A. 331, 336 C. 1904 [1] 1593; B. 37, 3450 C. 1904 [2] 1274).
- \*4)  $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm.  $7-9^\circ$ ; Sd.  $100-102^\circ_{18.5}$  (B. 35, 4267 C. 1903 [1] 280; A. 334, 205 C. 1904 [2] 884).
- \*6) Angelikasäure (Bl. [3] 29, 327 C. 1903 [1] 1225).
- \*7)  $\alpha$ -Buten- $\delta$ -Carbonsäure (A. 334, 206 C. 1904 [2] 884).
- \*8)  $\beta$ -Buten- $\alpha$ -Carbonsäure. Ba (A. 331, 138 C. 1904 [1] 933; A. 334, 206 C. 1904 [2] 884).
- \*9) Tiglinsäure (Bl. [3] 29, 330 C. 1903 [1] 1226).
- \*10)  $\beta$ -Methylpropen- $\alpha$ -Carbonsäure (M. 24, 769 C. 1904 [1] 158).
- \*13) Lakton d.  $\gamma$ -Oxyvaleriansäure (C. 1903 [2] 288).
- \*14) Lakton d.  $\delta$ -Oxyvaleriansäure. Sd.  $113-114^\circ_{13-14}$  ( $218-220^\circ$ ) (B. 36, 1200 C. 1903 [1] 1175; B. 37, 1857 C. 1904 [1] 1487).
- \*18) Aldehyd d.  $\beta$ -Ketobutan- $\delta$ -Carbonsäure (B. 36, 1934 C. 1903 [2] 189).
- \*21) Äthylester d. Akrylsäure (Bl. [3] 29, 1044 C. 1903 [2] 1424).
- \*24) Verbindung (aus  $\delta$ -Oxy- $\alpha$ -Methylglutarsäure). Sd.  $222-226^\circ_{98}$  (B. 36, 1202 C. 1903 [1] 1175).
- 27) polym. Lakton d.  $\delta$ -Oxyvaleriansäure. =  $(C_5H_8O_2)_x$ . Sm.  $47-48^\circ$  (B. 36, 1200 C. 1903 [1] 1175).
- $C_5H_8O_3$  \*6)  $\alpha$ -Ketobutan- $\alpha$ -Carbonsäure. Sd.  $179^\circ$ .  $Ca + 2H_2O$ ,  $Ba + H_2O$ ,  $Ag$  (A. 331, 129 C. 1904 [1] 932).
- \*8) Lävulinsäure.  $Ca + 2H_2O$  (A. 331, 108 C. 1904 [1] 931; B. 37, 2710 C. 1904 [2] 528).
- \*14)  $\alpha\gamma$ -Lakton d.  $\beta\gamma$ -Dioxybutan- $\alpha$ -Carbonsäure? Fl. (A. 334, 92 C. 1904 [2] 887).
- 28) Monoformal- $\alpha$ -Oxybuttersäure. Sd.  $164^\circ$  (R. 21, 318 C. 1903 [1] 137).
- 29) Monoformal- $\beta$ -Oxybuttersäure. Sm.  $9^\circ$ ; Sd.  $190^\circ$  (R. 21, 318 C. 1903 [1] 137).
- 30) Monoformal- $\alpha$ -Oxyisobuttersäure. Sd.  $142^\circ$  (R. 21, 318 C. 1903 [1] 137).
- 31)  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxybutan- $\alpha$ -Carbonsäure. Fl. (A. 334, 88 C. 1904 [2] 887).
- 32) Aldehyd d. r- $\alpha$ -Acetoxypropionsäure. Sd.  $52-55^\circ_{16}$  (A. 335, 266 C. 1904 [2] 1284).
- $C_5H_8O_4$  \*1)  $\alpha$ -Acetoxypropionsäure. Sm.  $57-60^\circ$ ; Sd.  $127^\circ_{11}$  (B. 36, 468 C. 1903 [1] 626; B. 37, 3972 C. 1904 [2] 1605).
- \*4) Propan- $\alpha\alpha$ -Dicarbonsäure (C. 1903 [2] 1330).
- \*5) Brenzweinsäure (C. 1903 [2] 712).
- \*6) Glutarsäure (C. 1903 [2] 1053, 1330).
- \*14) Diacetat d. Dioxymethan (C. 1903 [2] 656).
- \*16)  $\gamma\gamma$ -Dioxy- $\beta\delta$ -Diketopentan.  $Ba_2$ ,  $Pb + H_2O$  (B. 36, 3225 C. 1903 [2] 940).
- 19) r-Propan- $\alpha\beta$ -Dicarbonsäure. Sm.  $112.5-113.5^\circ$  (C. 1903 [2] 288).
- 20) Monomethylester d. Bernsteinsäure. Sm.  $57-58^\circ$ ; Sd.  $151^\circ_{20}$ .  $Ag$  (Bl. [3] 29, 1046 C. 1903 [2] 1424; Soc. 85, 539 C. 1904 [1] 1481).
- $C_5H_8O_5$  \*5) r- $\beta$ -Oxypropan- $\alpha\beta$ -Dicarbonsäure. Sm.  $116-117^\circ$  (B. 35, 4370 C. 1903 [1] 281).
- \*9)  $\beta$ -Oxypropan- $\alpha\gamma$ -Dicarbonsäure. Sm.  $95^\circ$  (Bl. [3] 29, 1014 C. 1903 [2] 1315).
- $C_5H_8O_6$  \*6) Monomethylester d. d-Weinsäure. K. (Soc. 85, 1122 C. 1904 [2] 1206).
- 8) Dimethylester d. Dioxymethandicarbonsäure. Sm.  $81^\circ$  ( $77.5^\circ$ ) (C. r. 137, 198 C. 1903 [2] 659; B. 37, 1781 C. 1904 [1] 1483).
- $C_5H_8O_7$  \*3) d- $\alpha\beta\gamma$ -Trioxypropan- $\alpha\gamma$ -Dicarbonsäure (B. 36, 3201 C. 1903 [2] 1055).
- $C_5H_8N_2$  \*4) 1,2-Dimethylimidazol. Sd.  $205-206^\circ$  ( $2HCl$ ,  $PtCl_4$ ), ( $HCl$ ,  $AuCl_3$ ) Pikrat (Soc. 83, 469 C. 1903 [1] 931, 1143).
- 7) Methyläthylazäthan. Sm.  $206^\circ$  (B. 36, 3186 C. 1903 [2] 939).
- 8) 1,3-Dimethylpyrazol. Sd.  $148^\circ$ .  $HCl$ , ( $2HCl$ ,  $PtCl_4$ ), ( $HCl$ ,  $AuCl_3$ ) +  $2H_2O$  (Soc. 83, 467 C. 1903 [1] 931, 1143).

- $C_5H_8N_2$  9) 4,5-Dimethylpyrazol. Sm. 55—57° (*C.* 1903 [2] 1324).  
 10) 4-[oder 5]-Aethylimidazol. Fl. (HCl,  $AuCl_3$ ),  $HNO_3$ , Pikrat (*B.* 37, 2477 *C.* 1904 [2] 419).  
 11) 1,4-[oder 1,5]-Dimethylimidazol. Sd. 210—215° (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ), Pikrat (*Soc.* 83, 443 *C.* 1903 [1] 930, 1143).  
 12) isom. 1,4-[oder 1,5]-Dimethylimidazol. Sd. 116°<sub>25</sub>; HCl, (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ), Pikrat (*Soc.* 83, 465 *C.* 1903 [1] 931, 1143).  
 13) Nitril d.  $\alpha$ -Aethylidenamidopropionsäure. Sd. 152° (*Bl.* [3] 29, 1185 *C.* 1904 [1] 354).
- $C_5H_8Br_2$  9) 1-Brom-1-Brommethyl-R-Tetramethylen? Sd. 192—193° (*C.* 1903 [1] 828).
- $C_5H_8Br_4$  \*2)  $\alpha\beta\gamma\delta$ -Tetrabrompentan. Sm. 41,5—43° (*C.* 1904 [2] 183).
- $C_5H_8N$  \*2) 5-Methyl-2,3-Dihydropyrrol. Sd. 42—45°<sub>95–100</sub> (*G.* 33 [2] 314 *C.* 1904 [1] 292).
- $C_5H_9N_4$  \*7) Nitril d.  $\beta$ -Methylpropan- $\alpha$ -Carbonsäure (*C.* 1904 [2] 665).  
 1) Verbindung (aus d. Verb.  $C_5H_{10}ON_4$ ) =  $(C_5H_9N_4)_x$ . Sm. 147° u. Zers. (*B.* 36, 1298 *C.* 1903 [1] 1256).
- $C_5H_9Br$  \*1) Brom-R-Pentamethylen. Sd. 135—138°<sub>743</sub> (*C.* 1903 [1] 828).  
 5)  $\beta\gamma\gamma$ -Tribrom- $\beta$ -Methylbutan (*B.* 37, 548 *C.* 1904 [1] 866).
- $C_5H_{10}O$  \*14) Pentan- $\alpha\delta$ -Oxyd. Sd. 77,5—78°<sub>740</sub> (*M.* 23, 1087 *C.* 1903 [1] 384; *M.* 24, 354 *C.* 1903 [2] 552).  
 \*15) Pentan- $\alpha\epsilon$ -Oxyd. Sd. 81—82° (*M.* 23, 1073 *C.* 1903 [1] 393).  
 \*17)  $\beta$ -Methylbutan- $\beta\gamma$ -Oxyd (*B.* 36, 2018 *C.* 1903 [2] 338).  
 \*21)  $\beta$ -Ketopentan (*Bl.* [3] 29, 673 *C.* 1903 [2] 487; *C. r.* 137, 576 *C.* 1903 [2] 1110).  
 \*22)  $\gamma$ -Ketopentan (*C. r.* 137, 576 *C.* 1903 [2] 1110).  
 \*23)  $\gamma$ -Keto- $\beta$ -Methylbutan. Sd. 93—94° (*Bl.* [3] 29, 674 *C.* 1903 [2] 487).  
 \*24) Aldehyd d. Valeriansäure. Sd. 101—102° (*C. r.* 138, 698 *C.* 1904 [1] 1066).  
 \*26) Aldehyd d. Isovaleriansäure. + Anilinsulfit, + Anilinanhydrosulfit (*A.* 325, 356 *C.* 1903 [1] 696; *C. r.* 137, 989 *C.* 1904 [1] 257; *M.* 25, 150 *C.* 1904 [1] 1000).  
 \*33) 1-Oxymethyl-R-Tetramethylen. Sd. 139°<sub>747</sub> (*C.* 1903 [1] 828).
- $C_5H_{10}O_2$  \*7)  $\epsilon$ -Oxy- $\beta$ -Ketopentan (*M.* 24, 351 *C.* 1903 [2] 551).  
 \*14) 1-Butan- $\beta$ -Carbonsäure (*B.* 37, 352 *C.* 1904 [1] 579).  
 \*15) Isovaleriansäure.  $NH_4$  (*M.* 23, 1053 *C.* 1903 [1] 387).  
 \*21) Aethylester d. Propionsäure [*Bl.* [3] 29, 1044 *C.* 1903 [2] 1424].
- $C_5H_{10}O_3$  \*1) Aethylidenäther d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 85°<sub>15</sub> (*A.* 335, 214 *C.* 1904 [2] 1202).  
 \*2)  $\alpha$ -Oxyvaleriansäure. Sm. 34°. Ca, Zn + 2H<sub>2</sub>O (*A.* 331, 132 *C.* 1904 [1] 932).  
 \*10)  $\beta$ -Oxy- $\beta$ -Methylpropan- $\alpha$ -Carbonsäure. Ag (*M.* 24, 768 *C.* 1904 [1] 158).  
 \*32)  $\alpha$ -Oxy- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 124° (123°)  $NH_4$ , Na, K, Ca + 1½H<sub>2</sub>O (*Bl.* [3] 31, 119 *C.* 1904 [2] 664; *M.* 25, 869 *C.* 1904 [2] 1106).  
 \*35) Aethylester d.  $\beta$ -Oxypropionsäure. Sd. 187° (170—175°) (*Bl.* [3] 29, 1044 *C.* 1903 [2] 1424; *B.* 37, 1276 *C.* 1904 [1] 1335).  
 38)  $\alpha$ -Acetat d.  $\alpha\beta$ -Dioxypropan. Sd. 182—183°<sub>700</sub> (*C.* 1903 [2] 486).
- $C_5H_{10}O_4$  \*2)  $\beta\gamma$ -Dioxybutan- $\alpha$ -Carbonsäure? Ca, Ba + H<sub>2</sub>O, Ag (*A.* 334, 94 *C.* 1904 [2] 887).  
 \*7) Aethylester d.  $\alpha\beta$ -Dioxypropionsäure. Sd. 200° (*B.* 37, 1277 *C.* 1904 [1] 1335).  
 13) Parasaccharopentose. Sm. 81,5—82° (*B.* 37, 1200 *C.* 1904 [1] 1197).  
 14)  $\alpha\gamma$ -Dioxybutan- $\alpha$ -Carbonsäure. Ca, Ba, Zn (*A.* 334, 90 *C.* 1904 [2] 887).
- $C_5H_{10}O_5$  \*1) d-Arabinose (*B.* 36, 1194 *C.* 1903 [1] 1217).  
 \*2) l-Arabinose (*B.* 36, 1194 *C.* 1903 [1] 1217; *B.* 37, 1210 *C.* 1904 [1] 1337).
- $C_5H_{10}N_2$  \*4) 2-Methyl-1,4,5,6-Tetrahydro-1,3-Diazin. Sm. 72—74°; Sd. 120—126°<sub>12</sub> (2HCl,  $PtCl_4$ ),  $HNO_3$ , Oxalat, Pikrat, harnsaures Salz (*B.* 36, 334 *C.* 1903 [1] 703).  
 8)  $\alpha\gamma$ -Di[Methylenamido]propan. Fl. (*B.* 36, 36 *C.* 1903 [1] 502).  
 9) Nitril d.  $\alpha$ -Aethylamidopropionsäure. Sd. 153—154° (*C.* 1904 [2] 945).

- $C_5H_{10}N_2$  10) Nitril d.  $\alpha$ -Dimethylamidopropionsäure. Sd. 144° (C. 1904 [2] 945).  
 $C_5H_{10}Cl_2$  \*2)  $\beta\gamma$ -Dichlor- $\beta$ -Methylbutan (M. 23, 1082 C. 1903 [1] 384).  
 \*5)  $\gamma\delta$ -Dichlor- $\beta$ -Methylbutan. Sd. 142–145° (M. 23, 1079 C. 1903 [1] 384).  
 \*11)  $\beta\gamma$ -Dichlorpentan. Sd. 50–51°<sub>20</sub> (M. 23, 1085 C. 1903 [1] 384).  
 12)  $\alpha\delta$ -Dichlorpentan. Sd. 58–60°<sub>15</sub> (M. 23, 1088 C. 1903 [1] 384).  
 13)  $\alpha\delta$ -Dichlorpentan. Sd. 176–178° u. Zers. (B. 37, 2918 C. 1904 [2] 1237).  
 $C_5H_{10}Br_2$  \*2)  $\alpha\delta$ -Dibrompentan. Sd. 99°<sub>14</sub> (M. 23, 1086 C. 1903 [1] 384).  
 \*3)  $\alpha\delta$ -Dibrompentan. Sm. —34 bis —35°; Sd. 221°<sub>763</sub> (M. 23, 1071 C. 1903 [1] 393; C. r. 138, 1611 C. 1904 [2] 429; B. 37, 3210 C. 1904 [2] 1238).  
 \*5)  $\beta\gamma$ -Dibrompentan. Sd. 74°<sub>17</sub> (M. 23, 1083 C. 1903 [1] 384).  
 \*8)  $\beta\gamma$ -Dibrom- $\beta$ -Methylbutan. Sd. 61–64°<sub>17</sub> (M. 23, 1081 C. 1903 [1] 384).  
 \*10)  $\gamma\delta$ -Dibrom- $\beta$ -Methylbutan (M. 23, 1077 C. 1903 [1] 384).  
 15)  $\beta\delta$ -Dibrompentan. Sd. 63,5°<sub>9</sub> (C. 1904 [1] 1327).  
 $C_5H_{10}J_2$  2)  $\alpha\delta$ -Dijodpentan. Sm. 9°; Sd. 149°<sub>20</sub> (C. r. 138, 1611 C. 1904 [2] 429).  
 $C_5H_{11}N$  \*9) 1-Amidomethyl-R-Tetramethylen. Sd. 110°<sub>753</sub> (82–83°?) (C. 1903 [1] 828).  
 \*11) 2-Methyltetrahydropyrrol. Sd. 95°<sub>742</sub>. (HCl, AuCl<sub>3</sub>) (G. 33 [2] 267 C. 1904 [1] 40; G. 33 [2] 314 C. 1904 [1] 292).  
 \*13) Piperidin. + P<sub>10</sub>H<sub>4</sub> (B. 36, 993 C. 1903 [1] 1072).  
 $C_5H_{11}Cl$  \*6)  $\gamma$ -Chlor- $\beta$ -Methylbutan (C. 1904 [2] 691).  
 $C_5H_{11}Br$  \*4)  $\beta$ -Brom- $\beta$ -Methylbutan (C. 1904 [2] 691).  
 \*5)  $\gamma$ -Brom- $\beta$ -Methylbutan (C. 1904 [2] 691).  
 \*6)  $\delta$ -Brom- $\beta$ -Methylbutan (C. 1904 [2] 691).  
 $C_5H_{11}J$  9) d- $\alpha$ -Brom- $\beta$ -Methylbutan. Sd. 118–120° (B. 37, 1046 C. 1904 [1] 1248).  
 \*6)  $\gamma$ -Jod- $\beta$ -Methylbutan (C. 1904 [2] 691).  
 \*7)  $\delta$ -Jod- $\beta$ -Methylbutan. Sd. 147° cor. (B. [3] 31, 600 C. 1904 [2] 19).  
 $C_5H_{12}O$  9) d- $\alpha$ -Jod- $\beta$ -Methylbutan (B. 37, 1045 C. 1904 [1] 1248).  
 \*1)  $\alpha$ -Oxypentan (M. 25, 1090 C. 1904 [2] 1698).  
 \*2)  $\beta$ -Oxypentan. Sd. 118° (C. r. 137, 302 C. 1903 [2] 708).  
 \*3)  $\gamma$ -Oxypentan. Sd. 116° (C. r. 137, 302 C. 1903 [2] 708).  
 \*4) l- $\alpha$ -Oxy- $\beta$ -Methylbutan. Sd. 126–128° (M. 25, 1098 C. 1904 [2] 1698).  
 \*7) Isoamylalkohol (C. r. 137, 302 C. 1903 [2] 708; M. 24, 533 C. 1903 [2] 869; B. [3] 31, 599 C. 1904 [2] 18).  
 \*8)  $\alpha$ -Oxy- $\beta\beta$ -Dimethylpropan (M. 25, 1094 C. 1904 [2] 1698).  
 16) Methyläther d.  $\beta$ -Oxy- $\beta$ -Methylpropan. Sd. 53–54° (C. 1903 [1] 1119; 1904 [1] 1065).  
 $C_5H_{12}O_2$  \*1)  $\alpha\delta$ -Dioxypentan. Sd. 115–116°<sub>14</sub> (M. 23, 1088 C. 1903 [1] 384; M. 24, 353 C. 1903 [2] 551).  
 \*3)  $\beta\gamma$ -Dioxypentan. Sd. 96,5–97°<sub>17</sub> (M. 23, 1084 C. 1903 [1] 384).  
 \*4)  $\beta\delta$ -Dioxypentan. Sd. 197° (C. 1904 [1] 1327).  
 \*5)  $\alpha\beta$ -Dioxy- $\beta$ -Methylbutan. Sd. 186–189° (C. r. 137, 757 C. 1903 [2] 1415).  
 $C_5H_{12}O_4$  \*1) Pentaerythrit (B. 36, 1349 C. 1903 [1] 1299).  
 $C_5H_{12}N_2$  7) 3,5-Dimethyltetrahydropyrazol. Sm. —5 bis —7°; Sd. 141–143°<sub>746</sub>. HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat, + Aceton (B. 36, 221 C. 1903 [1] 522).  
 $C_6H_{12}S$  \*3) Aethylpropylsulfid. Sd. 117°<sub>745</sub> (J. pr. [2] 66, 527 C. 1903 [1] 561).  
 \*4) Aethylisopropylsulfid. Sd. 106–107° (J. pr. [2] 66, 526 C. 1903 [1] 561).  
 $C_6H_{13}N$  \*3)  $\gamma$ -Amidopentan (B. 36, 703 C. 1903 [1] 818).  
 \*4)  $\beta$ -Amido- $\beta$ -Methylbutan (B. 36, 692 C. 1903 [1] 817).  
 \*6) Isoamylamin. Salze siehe (C. r. 135, 902 C. 1903 [1] 131).  
 \*11) Aethylisopropylamin. (2HCl, PtCl<sub>4</sub>) (C. 1904 [1] 923).  
 \*13) Methyläthylamin. (2HCl, PtCl<sub>4</sub>) (C. 1904 [1] 923).  
 16) d- $\alpha$ -Amido- $\beta$ -Methylbutan. Sd. 95,5–96°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 37, 1047 C. 1904 [1] 1248).  
 $C_6H_{14}N_2$  \*1)  $\alpha\epsilon$ -Diamidopentan (Cadaverin, Musculamin). 2HCl, (2HCl, PtCl<sub>4</sub>) (C. r. 135, 699 C. 1902 [2] 1365; C. r. 135, 865 C. 1903 [1] 46; C. r. 136, 1285 C. 1903 [2] 127; B. 37, 3587 C. 1904 [2] 1407).  
 \*3) stab.  $\beta\delta$ -Diamidopentan. Fl. (B. 36, 224 C. 1903 [1] 522).  
 \*9) Spermin (C. r. 135, 1141 C. 1903 [1] 274).  
 $C_6H_{14}Sn$  \*1) Zinntrimethyläthyl. Sd. 107–108°<sub>769</sub> (C. 1904 [1] 353).

- $C_5H_2O_4N_4$  C 33,0 — H 1,1 — O 35,1 — N 30,8 — M. G. 182.  
 1) Verbindung (aus  $\beta$ -Nitroisoxazol). *Ag (Am. 29, 273 C. 1903 [1] 958).*  
 $C_5H_2O_4Cl_3$  1) Methylenester d. Trichloressigsäure. Sm. 76° (*C. r. 136, 1566 C. 1903 [2] 342*).  
 $C_5H_3O_2Cl$  \*2) Chlorid d. Furan-2-Carbonsäure. Sd. 173° (*B. 37, 2951 C. 1904 [2] 992*).  
 $C_5H_3O_3Br$  6) Bromisobrenzschleimsäure. Sm. 172°. Hydroxylaminsalz, Phenylhydrazinsalz (*C. r. 136, 49 C. 1903 [1] 443*).  
 $C_5H_5NCl_4$  1) 2,3,4,5-Tetrachlor-1-Methylpyrrol. Sm. 118—119° (*G. 34 [1] 259 C. 1904 [2] 120*).  
 $C_5H_4ON_4$  \*1) Hypoxanthin (*A. 331, 78 C. 1904 [1] 1200*).  
 $C_5H_4O_2N_2$  6) polym. Nitropyridin. Zers. bei 234° (*C. 1903 [1] 1033*).  
 7) 1,3-Diazin-5-Carbonsäure. Sm. 270° (*B. 37, 3650 C. 1904 [2] 1513*).  
 $C_5H_4O_2N_4$  \*1) Xanthin (D.R.P. 143725 *C. 1903 [2] 474*).  
 $C_5H_4O_3N_4$  \*1) Harnsäure (*J. pr. [2] 67, 274 C. 1903 [1] 1218; G. 33 [2] 93, 98 C. 1903 [2] 1287*).  
 $C_5H_4O_3Br_2$  \*5)  $\alpha\gamma$ -Lakton d.  $\alpha\beta$ -Dibrom- $\gamma\gamma$ -Dioxypropen- $\gamma$ -Methyläther- $\alpha$ -Carbonsäure. Sm. 51°; Sd. 249—251° (*M. 25, 493 C. 1904 [2] 324*).  
 6) Methylester d.  $\alpha\beta$ -Dibromäthen- $\alpha$ -Carbonsäure- $\beta$ -Carbonsäurealdehyd (M. d. Mukobromsäure). Sd. 230—234° (*M. 25, 493 C. 1904 [2] 324*).  
 $C_5H_4O_4N_2$  \*7) Imidazol-4,5-Dicarbonsäure (*B. 37, 701 C. 1904 [1] 1562*).  
 10) Amid d.  $\beta$ -Nitrofuran-2-Carbonsäure. Sm. 180° (*C. r. 137, 520 C. 1903 [2] 1069*).  
 $C_5H_4NCl$  \*2) 3-Chlorpyridin. Sd. 147—149°. (2HCl, PtCl<sub>4</sub>) (*B. 37, 3835 C. 1904 [2] 1615*).  
 $C_5H_4NCl_3$  1) 2,3,5-Trichlor-1-Methylpyrrol. Fl. (*G. 34 [1] 257 C. 1904 [2] 120*).  
 $C_5H_5ON$  \*3) 4-Oxypyridin.  $\frac{1}{2}HCl + H_2O$ ,  $\frac{1}{2}HBr + H_2O$ ,  $\frac{1}{2}HJ + H_2O$  (*C. 1903 [1] 167; J. pr. [2] 67, 47 C. 1903 [1] 723*).  
 $C_5H_5O_2N$  \*16) Imid d. Citrakonsäure. Sm. 109° (*C. 1903 [1] 838*).  
 21) polym. Cyanmethylen-carbonsäureäthylester. Sm. 122° (*Am. 30, 463 C. 1904 [1] 378*).  
 $C_5H_5O_3Br$  3) Verbindung (aus  $\beta$ -Brom- $\alpha$ -Keto- $\beta$ -Buten- $\alpha\gamma$ -Dicarbonsäure). Sm. 95° (*R. 23, 149 C. 1904 [2] 193*).  
 $C_5H_5O_4N_3$  11) Nitril d.  $\alpha$ -Nitro- $\beta$ -Acetoximidopropionsäure. Sm. 87—88° (*Am. 29, 265 C. 1903 [1] 958*).  
 $C_5H_5O_6N$  C 34,3 — H 2,8 — O 54,9 — N 8,0 — M. G. 175.  
 1)  $\alpha$ -Methylester d.  $\alpha$ -Nitroäthen- $\alpha\beta$ -Dicarbonsäure ( $\alpha$ -M. d. Nitromaleinsäure). K (*Am. 32, 233 C. 1904 [2] 1141*).  
 $C_5H_5N_2Cl$  2) 4-Chlor-2-Methyl-1,3-Diazin. Sm. 59—60°; Sd. 168°<sub>708</sub>. HCl (*B. 37, 3641 C. 1904 [2] 1416*).  
 $C_5H_5N_5S$  1) 6-Amido-2-Merkaptopurin + H<sub>2</sub>O (*A. 331, 84 C. 1904 [1] 1200*).  
 $C_5H_6ON_2$  10) 4-Keto-2-Methyl-3,4-Dihydro-1,3-Diazin +  $\frac{1}{2}H_2O$ . Sm. 212° (wasserfrei). (2HCl, PtCl<sub>4</sub>) (*B. 37, 3640 C. 1904 [2] 1416*).  
 $C_5H_6O_2N_2$  \*5) 2,4-Diketo-5-Methyl-1,2,3,4-Tetrahydro-1,3-Diazin (Thymin). Sm. 326° (*Am. 29, 487 C. 1903 [1] 1309; H. 39, 134 C. 1903 [2] 581*).  
 \*11) 4-Methylpyrazol-3[5]-Carbonsäure. Sm. 218—220° (*B. 36, 1132 C. 1903 [1] 1139*).  
 13) 4-Acetyl-5-Methyl-1,2,3-Oxdiazol. Fl. (*A. 325, 139 C. 1903 [1] 644*).  
 14) 1-Methylpyrazol-3-Carbonsäure. Sm. 222° (*Soc. 83, 469 C. 1903 [1] 931, 1143*).  
 $C_5H_6O_3N_2$  \*1) Dimethylparabansäure. Sm. 149—150° (*A. 327, 261 C. 1903 [2] 349*).  
 \*5) 2,4,6-Triketo-5-Methylhexahydro-1,3-Diazin. Sm. 202—203°. Na + 5H<sub>2</sub>O (D.R.P. 146948 *C. 1904 [1] 68; A. 335, 355 C. 1904 [2] 1381*).  
 20) 2,4-Diketo-1-Acetyltetrahydroimidazol + H<sub>2</sub>O. Sm. 143—144° (*A. 327, 374 C. 1903 [2] 661; A. 333, 130 C. 1904 [2] 895*).  
 $C_5H_6O_4N_4$  \*3) Pseudoharnsäure. K + 2H<sub>2</sub>O (*A. 333, 79 C. 1904 [2] 826*).  
 $C_5H_6O_4Cl_2$  5) Methylenester d. Chloressigsäure. Sm. 52—53° (*C. r. 136, 1566 C. 1903 [2] 342*).  
 $C_5H_6N_2Br_2$  1) 4,5-Dibrom-1,3-Dimethylpyrazol. Sm. 74° (*Soc. 83, 469 C. 1903 [1] 931, 1143*).

- $C_5H_6N_2Br_2$  2) 2,4[oder 2,5]-Dibrom-1,4[oder 1,5]-Dimethylimidazol. Sm. 127°  
(*See*. 83 466 *C.* 1903 [1] 931, 1143).
- $C_5H_7ON$  \*4) 3,5-Dimethylisoxazol (*B.* 36, 220 *C.* 1903 [1] 522).
- $C_5H_7ON_3$  6) Anhydrodiacetylguanidin. Sm. 210—212°.  $HCl + H_2O$ , (2HCl,  $PtCl_4$ ),  
 $HBr + H_2O$ , Mg, Ag (*Ar.* 241, 451 *C.* 1903 [2] 988).
- 7) 4-Nitroso-3,5-Dimethylpyrazol. Sm. 128° (*A.* 325, 193 *C.* 1903 [1] 647).
- 8) Methyläther d. 2-Amido-4-Oxy-1,3-Diazin. Sm. 118,5—120°;  
Sd. 274°<sub>64</sub>. (2HCl,  $PtCl_4$ ) (*B.* 36, 3382 *C.* 1903 [2] 1193).
- 9) 4-Amido-2-Keto-5-Methyl-1,2-Dihydro-1,3-Diazin(5-Methyleytosin).  
Sm. 270°.  $HCl + 2H_2O$ , 5 + 3HCl +  $H_2O$ , Pikrat (*Am.* 31, 599  
*C.* 1904 [2] 242).
- 10) 2-Amido-4-Keto-5-Methyl-3,4-Dihydro-1,3-Diazin. Sm. 320—321°.  
 $HCl$ , (2HCl,  $PtCl_4 + 4H_2O$ ),  $H_2SO_4$ , Pikrat (*Am.* 32, 135 *C.* 1904 [2] 956).
- $C_5H_7O_2N$  \*4) Nitril d.  $\alpha$ -Acetoxypropionsäure. Sd. 172—173°<sub>700</sub> (*B.* 37, 3974  
*C.* 1904 [2] 1605).
- \*9) Methylimid d. Bernsteinsäure. Sm. 66—67° (*C.* 1903 [1] 841).
- 12) Nitril d. Propionoxylessigsäure. Sd. 188—189°<sub>750</sub> (*C.* 1904 [2] 1377).
- $C_5H_7O_2N_3$  12) 4-Nitro-3,5-Dimethylpyrazol. Sm. 124—126° (*A.* 325, 193 *C.* 1903  
[1] 647).
- 13) Methyläther d. 6-Imido-2-Oxy-4-Keto-3,4,5,6-Tetrahydro-1,3-Diazin.  
Sm. 228—229° (*D. R. P.* 155 732 *C.* 1904 [2] 1631).
- $C_5H_7O_2Br$  9)  $\beta$ -Brom- $\beta$ -Buten- $\alpha$ -Carbonsäure. Sm. 54° (*A.* 331, 138 *C.* 1904 [1] 932).
- 10) Aethylester d.  $\beta$ -Bromakrylsäure (*M.* 25, 784 *C.* 1904 [2] 1122).
- $C_5H_7O_3N_3$  \*9) 5-Methylamido-2,4,6-Triketohexahydro-1,3-Diazin (*A.* 333, 64  
*C.* 1904 [2] 772).
- 11) 5-Amido-2,4,6-Triketo-5-Methylhexahydro-1,3-Diazin. Sm. 237°  
u. Zers. (*A.* 335, 359 *C.* 1904 [2] 1382).
- $C_5H_7O_3N_5$  2) 1-Ureido-5-Methyl-1-Triazol-4-Carbonsäure. Zers. bei 205° (*A.* 325,  
161 *C.* 1903 [1] 645).
- $C_5H_7O_3Cl$  6) Acetat d.  $\gamma$ -Chlor- $\beta$ -Keto- $\alpha$ -Oxypropan. Sd. 108—109°<sub>12</sub> (*C.* 1904  
[1] 576).
- 7) Chlorid d.  $\alpha$ -Acetoxypropionsäure. Sd. 56°<sub>11</sub> (150°<sub>700</sub>) (*B.* 36, 468  
*C.* 1903 [1] 626; *B.* 37, 3973 *C.* 1904 [2] 1605).
- $C_5H_7O_4N_3$  4) 1-Nitro-2,4-Diketo-3-Aethyltetrahydroimidazol. Sm. 95—96° (*A.* 327,  
379 *C.* 1903 [2] 662).
- $C_5H_7O_4Br$  \*4) Citrabrombrenzweinsäure (*B.* 35, 4370 *C.* 1903 [1] 281).
- $C_5H_7O_5N$  \*5) Dimethylester d. Oximidomethandicarbonsäure. Sm. 67°; Sd. 168°<sub>16</sub>.  
Na (*C. r.* 137, 198 *C.* 1903 [2] 659).
- $C_5H_7O_6N$  \*1) Dimethylester d. Nitromalonsäure. Dimethylaminsalz (*B.* 37, 1783  
*C.* 1904 [1] 1483).
- 2)  $\beta$ -Nitro- $\alpha$ -Acetoxypropionsäure. Sm. 90—91°. Ag (*Am.* 32, 239  
*C.* 1904 [2] 1141).
- $C_5H_7N_2J$  3) Pyridinjodamid (*C. r.* 136, 1471 *C.* 1903 [2] 296).
- $C_5H_8ON_2$  \*2) 5-Keto-3,4-Dimethyl-4,5-Dihydropyrazol. Sm. 256° (268°) (*Bl.* [3]  
27, 1103 *C.* 1903 [1] 227; *B.* 37, 2834 *C.* 1904 [2] 642).
- 11) 2-Oxy-4[oder 5]-Aethylimidazol. Sm. 166—167° (*B.* 37, 2478 *C.* 1904  
[2] 419).
- 12) Nitril d.  $\alpha$ -Acetylamidopropionsäure. Sm. 102° (*Bl.* [3] 29, 1193  
*C.* 1904 [1] 361).
- $C_5H_8O_2N_2$  10) 2,4-Diketo-3-Aethyltetrahydroimidazol. Sm. 102° (*A.* 327, 378  
*C.* 1903 [2] 662).
- 20) 3,6-Diketo-2-Methylhexahydro-1,4-Diazin (Methyldiacipiperazin).  
Sm. 238—239° u. Zers. (*B.* 36, 2113 *C.* 1903 [2] 345).
- 21) Methylester d.  $\alpha$ -Diazobuttersäure. Sd. 54—56°<sub>12</sub> (*B.* 37, 1275 *C.* 1904  
[1] 1334).
- 22) Aethylester d.  $\alpha$ -Diazopropionsäure. Sd. 65—68°<sub>41</sub> (*B.* 37, 1269  
*C.* 1904 [1] 1334).
- $C_5H_8O_3N_4$  9) 1-Oxy-4-[ $\alpha$ -Oximidoäthyl]-5-Methyl-1,2,3-Triazol. Zers. bei 213°  
(*A.* 325, 168 *C.* 1903 [1] 645).
- $C_5H_8O_3N_5$  2) 3,5-Diureidopyrazol (*B.* 37, 3525 *C.* 1904 [2] 1314).
- 3) 5-Oxy-4-[ $\alpha$ -Semicarbazonäthyl]-1,2,3-Triazol. Sm. 201° u. Zers.  
(*A.* 325, 156 *C.* 1903 [1] 644).

- $C_5H_8O_2Br_2$  \*3)  $\beta\gamma$ -Dibrombutan- $\alpha$ -Carbonsäure. Sm. 65—65,5° (A. 331, 140 C. 1904 [1] 933).
- 13)  $\alpha\delta$ -Dibrombutan- $\alpha$ -Carbonsäure. Sd. 171—174<sub>18-15</sub> (B. 37, 2843 C. 1904 [2] 643).
- $C_3H_8O_3N_2$  6)  $\gamma\delta$ -Dioximido- $\beta$ -Ketopentan. Sm. 128° u. Zers. (A. 325, 194 C. 1903 [1] 647).
- 7) Aethylester d.  $\beta$ -Oxy- $\alpha$ -Diazopropionsäure (B. 37, 1278 C. 1904 [1] 1335).
- $C_5H_8O_3N_4$  \*2) 5-Ureido-2,4-Diketo-3-Methyltetrahydroimidazol +  $H_2O$ . Sm. 219—221° (A. 333, 138 C. 1904 [2] 896).
- $C_5H_8O_3N_2$  6)  $\beta$ -Amid d.  $\beta$ -Amidoäthan- $\alpha\alpha\beta$ -Tricarbonsäure. Sm. 120° (A. 332, 121 C. 1904 [2] 189).
- $C_5H_8O_3N_4$  \*1) Uroxansäure. K +  $3H_2O$  (H. 41, 342 C. 1904 [1] 1338; A. 333, 153 C. 1904 [2] 897).
- $C_5H_8N_2S$  6) 2-Merkapto-4[oder 5]-Aethylimidazol. Sm. noch nicht bei 265° (B. 37, 2476 C. 1904 [2] 419).
- $C_5H_8N_2S_4$  1) Methylenäther d. Di[Methylimidomerkaptomethyl]disulfid. Sm. 118° (B. 36, 2270 C. 1903 [2] 563).
- $C_5H_8N_4S$  1) Methyläther d. 4,6-Diamido-2-Merkapto-1,3-Diazin. Sm. 185—186° (Am. 32, 349 C. 1904 [2] 1414).
- $C_5H_8ON$  \*6) Oximido-R-Pentamethylen (C. 1903 [1] 828).
- \*7)  $\alpha$ -Oximidoäthyl-R-Trimethylen. Sm. 50—55°. HCl (B. 36, 1380).
- 26) polym.  $\gamma$ -Nitroso- $\beta$ -Methyl- $\beta$ -Buten. Sm. 145° (B. 37, 543 C. 1904 [1] 865).
- $C_5H_8ON_3$  6) 5-Imido-2-Keto-4,4-Dimethyltetrahydroimidazol +  $H_2O$ . Sm. 230° u. Zers. (wasserfrei) (B. 36, 1292 C. 1903 [1] 1255).
- 7) Amid d. 5-Methyl-4,5-Dihydropyrazol-1-Carbonsäure. Sm. 198° (A. 335, 222 C. 1904 [2] 1203).
- 8) Verbindung (aus d. Verb.  $C_5H_8N_4$ ). Sm. 140° u. Zers. (B. 36, 1298 C. 1903 [1] 1256).
- $C_5H_8O_2N$  \*4)  $\gamma$ -Oximido- $\beta$ -Ketopentan. Sm. 58—59° (Soc. 83, 43 C. 1903 [1] 442).
- \*19) r-Tetrahydropyrrol-2-Carbonsäure. Sm. 203—203,5° (207°). Cu +  $2H_2O$ , HCl, (HCl,  $AuCl_3$ ) (A. 326, 104 C. 1903 [1] 842; H. 39, 89 C. 1903 [2] 580; H. 39, 157 C. 1903 [2] 580).
- 23) Säure (aus Gelatine). Cu +  $H_2O$  (H. 41, 99 C. 1904 [1] 1015).
- $C_5H_8O_2N_3$  4) Diacetylguanidin. Sm. 152°. Acetat (Ar. 241, 464 C. 1903 [2] 988).
- 5) 5-Imido-2-Keto-3-Oxy-4,4-Dimethyltetrahydroimidazol. Sm. 230° u. Zers. HCl (B. 34, 1875; B. 36, 1286 C. 1903 [1] 1254).
- 6) 3,5-Dioxy-6,6-Dimethyl-1,6-Dihydro-1,2,4-Triazin. Sm. 230° (Am. 28, 402 C. 1903 [1] 91).
- 7) cis- $\alpha$ -Guanidylpropen- $\beta$ -Carbonsäure. Sm. 319—320° (Am. 32, 140 C. 1904 [2] 957).
- 8) trans- $\alpha$ -Guanidylpropen- $\beta$ -Carbonsäure. Sm. 329—332° (Am. 32, 138 C. 1904 [2] 956).
- $C_5H_8O_2Cl$  \*8) Aethylester d. i- $\alpha$ -Chlorpropionsäure. Sd. 145—146° (B. 37, 1272 C. 1904 [1] 1334).
- \*19)  $\beta$ -Chlorpropylester d. Essigsäure. Sd. 152—153°<sub>750</sub> (C. 1903 [2] 486; R. 22, 209 C. 1903 [2] 22).
- $C_5H_8O_2Br$  19)  $\alpha$ -Brom- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 40,5—41°; Sd. 143 bis 145°<sub>33</sub> (Bl. [3] 31, 155 C. 1904 [1] 868).
- $C_5H_8O_2J$  \*5) Aethylester d.  $\beta$ -Jodpropionsäure (J. pr. [2] 68, 345 C. 1903 [2] 1317).
- $C_5H_8O_3N$  \*2)  $\alpha$ -Oximidovaleriansäure. Sm. 155° u. Zers. (Bl. [3] 31, 1073 C. 1904 [2] 1457).
- \*19)  $\alpha$ -Acetylamidopropionsäure. Sm. 137,5° (B. 36, 2114 C. 1903 [2] 346).
- \*21)  $\alpha$ -Oximidoisovaleriansäure. Sm. 171—172° u. Zers. (Bl. [3] 31, 1072 C. 1904 [2] 1457).
- \*22) p-Oxytetrahydropyrrol-2-Carbonsäure (H. 39, 157 C. 1903 [2] 580).
- $C_5H_8O_3N_3$  \*2) Di[Methylamid] d. Oximidomalonsäure. Sm. 157°. K, Fe (Soc. 83, 33 C. 1903 [1] 73, 441; Soc. 83, 21 C. 1903 [1] 77, 448).
- \*4) Amid d. Oximidomalonäthyläthersäure. Sm. 150,5—151,5° (M. 25, 74, 81 C. 1904 [1] 1552).

- $C_6H_9O_5N_3$  6) Methylester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 208° (*Am.* 28, 398 *C.* 1903 [1] 90).
- $C_6H_9O_4N$  \*2) d-Glutaminsäure.  $Zn + 2H_2O$  (*H.* 38, 114 *C.* 1903 [1] 1423; *C.* 1903 [2] 792, 1054).
- \*11) N-Aethylester d. Amidomethancarbonsäure-N-Carbonsäure (Carbäthoxylglycin). Sm. 75° (*B.* 36, 2108 *C.* 1903 [2] 345).
- 24) Aethylester d.  $\alpha$ -Nitropropionsäure. Sd. 190—195° (*C.* 1903 [2] 343).
- 25) Methyläthylester d. Stickstoffdicarbonsäure. Sm. 73°; Sd. 117—124°<sub>10</sub> (*B.* 37, 3873 *C.* 1904 [2] 1494).
- 26)  $\alpha$ -Amid d.  $\beta$ -Oxypropan- $\alpha\beta$ -Dicarbonsäure. Sm. 139—141° (*B.* 35, 4370 *C.* 1903 [1] 281).
- 27)  $\alpha$ -Amid d.  $\gamma$ -Oxypropan- $\alpha\beta$ -Dicarbonsäure ( $\beta$ -Itamalaminsäure). Sm. 118—120°.  $NH_4$ , Ag (*B.* 35, 4376 *C.* 1903 [1] 281).
- 28) Methylmonamid d. d-Weinsäure. Methylaminsalz (*Soc.* 83, 1360 *C.* 1904 [1] 84).
- $C_6H_9O_4N_3$  5) Aethylester d. Nitrosoureidoessigsäure. Sm. 66—67° (*A.* 327, 367 *C.* 1903 [2] 660).
- $C_6H_9O_5N_3$  2)  $\beta\gamma\delta$ -Trinitro- $\beta$ -Methylbutan. Sm. 189—190° (*C.* 1903 [1] 625).
- $C_6H_9NS$  \*9) d-sec. Butylsenfö. Sd. 159° (*B.* 36, 584 *C.* 1903 [1] 696).
- 11) l-sec. Butylsenfö. Sd. 159° (*B.* 36, 584 *C.* 1903 [1] 696).
- 12) Allylamid d. Thioessigsäure. Sd. 135—136°<sub>17</sub> (*B.* 37, 877 *C.* 1904 [1] 1004).
- $C_6H_9N_3S$  4)  $\alpha$ -Methyl- $\beta$ -[ $\alpha$ -Cyanäthyl]thioharnstoff. Fl. (*Bl.* [3] 29, 1194 *C.* 1904 [1] 361).
- $C_6H_{10}ON_4$  \*4) Porphyrerin. (2,4-Diimido-1-Oxy-5,5-Dimethyltetrahydroimidazol) (*B.* 36, 1284 *C.* 1903 [1] 1254).
- 5) Verbindung (aus Porphyrerin). Sm. 160° u. Zers.  $Na + 4H_2O$  (*B.* 36, 1297 *C.* 1903 [1] 1256).
- $C_6H_{10}O_2N_2$  \*4)  $\beta\delta$ -Dioximidopentan. Sm. 149—150° (*B.* 36, 220 *C.* 1903 [1] 521; *B.* 37, 3316 *C.* 1904 [2] 1026).
- \*14) Amid d. Propan- $\beta\beta$ -Dicarbonsäure. Sm. 263° (*Soc.* 83, 1241 *C.* 1903 [2] 1421).
- \*16) Di[Methylamid] d. Malonsäure. Sm. 135° (*Soc.* 83, 33 *C.* 1903 [1] 441).
- $C_6H_{10}O_2N_4$  6)  $\gamma$ -Oximido- $\beta$ -Semicarbazonbutan. Sm. 303° u. Zers. (*Bl.* [3] 31, 1165 *C.* 1904 [2] 1700).
- $C_6H_{10}O_2Cl_2$  6) Methyläthyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dioxyäthan. Sd. 173—175° (*G.* 33 [2] 415 *C.* 1904 [1] 922).
- $C_6H_{10}O_3N_2$  \*7) Aethylester d. Aethylnitrosamidoameisensäure. Sd. 69—70°<sub>15</sub> (*B.* 36, 2478 *C.* 1903 [2] 559; *B.* 36, 3635 *C.* 1903 [2] 1331; *B.* 36, 4295 *C.* 1904 [1] 507).
- \*17) Aethylester d. Ureidoessigsäure. Sm. 135° (*A.* 327, 366 *C.* 1903 [2] 660).
- \*18) Trimethyläthylennitrosit (*B.* 35, 4120 *C.* 1903 [1] 278; *B.* 36, 1765 *C.* 1903 [2] 100).
- 20)  $\alpha$ -Amidoacetylamidopropionsäure. Sm. 227° u. Zers. (*B.* 37, 2491 *C.* 1904 [2] 424).
- 21) Aethylester d. Amidooxymethylamidoameisenmethyläthersäure (O-Methylcarbäthoxyisoharnstoff). Sm. 5°.  $HCl$  (*C.* 1904 [2] 29).
- 22) Aethylester d.  $\alpha$ -Acetylhydrazin- $\beta$ -Carbonsäure. Sm. 90° (*P. GUTMANN*, Dissert., Heidelberg 1903).
- 23) Amid d. Amidoessigsäure-N-Carbonsäureäthylester (Carbäthoxylglycinamid). Sm. 101—103,5° (*B.* 36, 2109 *C.* 1903 [2] 345).
- $C_6H_{10}O_3N_4$  4) Amid d. Ureidoacetylamidoessigsäure ( $\alpha$ -Carbanidoglycylglycinamid). Sm. 210° u. Zers. (*B.* 36, 2098 *C.* 1903 [1] 1304).
- 5) isom. Amid d. Ureidoacetylamidoessigsäure ( $\beta$ -Carbamidoglycylglycinamid). Sm. 246° u. Zers. (*B.* 36, 2098 *C.* 1903 [1] 1304).
- $C_6H_{10}O_4N_2$  \*10) Trimethyläthylennitrosat (*B.* 36, 1765 *C.* 1903 [2] 100).
- 11)  $\beta\gamma$ -Dinitro- $\beta$ -Methylbutan. Sd. 105—110°<sub>0,013</sub> (*C.* 1903 [1] 625).
- 12)  $\beta$ -Diamidopropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 235° (*B.* 37, 1596 *C.* 1904 [1] 1449; *H.* 42, 282 *C.* 1904 [2] 953).
- 13) Dimethylester d. Methylendi[Amidoameisensäure]. Sm. 125° (*B.* 36, 2207 *C.* 1903 [2] 423).
- $C_6H_{10}N_2S$  7) Methyläther d. Allylamidoimidomerkaptomethan.  $HCl$ , Pikrat (*Soc.* 83, 556 *C.* 1903 [1] 1123).

- $C_5H_{10}N_2S_2$  \*1) Dimethylformcarbothialdin (*C. r.* 136, 452 *C.* 1903 [1] 699).  
 5) isom. Carbothialdin (*C. r.* 136, 452 *C.* 1903 [1] 699).  
 6) Pentamethylendiamindisulfid (*C. r.* 136, 452 *C.* 1903 [1] 699).
- $C_5H_{10}Br_2S_2$  \*1) Diäthyläther d. Dibromdimerkaptomethan. Sm. 68° u. Zers. (*C.* 1903 [1] 19).
- $C_5H_{11}ON$  \*21)  $\beta$ -Nitroso- $\beta$ -Methylbutan. Sm. 50—50,5° (*B.* 36, 693 *C.* 1903 [1] 817).  
 27)  $\alpha$ -Oximidopentan. Sm. 52° (*C. r.* 138, 698 *C.* 1904 [1] 1066).  
 28) Piperidin-N-Oxyd (Aldehyd d.  $\delta$ -Amidovaleriansäure?). Sm. 39°; Sd. 110—111°<sub>55</sub>. HCl (*B.* 25, 2781; 26, 2991; 31, 1560; 32, 2513; *Bl.* [3] 19, 616; *B.* 37, 3229 *C.* 1904 [2] 1152). — I, 949; \*I, 480.  
 29) Amid d. i-Butan- $\beta$ -Carbonsäure. Sm. 112°; Sd. 230°<sub>745</sub> (*M.* 25, 1097 *C.* 1904 [2] 1698).  
 30) Isobutylamid d. Ameisensäure. Sd. 111°<sub>12</sub> (*B.* 36, 2475 *C.* 1903 [2] 559).
- $C_5H_{11}ON_3$  3)  $\alpha$ -Semicarbazonbutan. Sm. 126° (*Bl.* [3] 31, 305 *C.* 1904 [1] 1133).  
 $C_5H_{11}OCl$  9)  $\delta$ -Chlor- $\alpha$ -Oxypentan? Sd. 70—80°<sub>12</sub> (*M.* 24, 353 *C.* 1903 [2] 551).  
 $C_5H_{11}O_2N$  \*2)  $\beta$ -Nitro- $\beta$ -Methylbutan. Sd. 149—150° (*C.* 1903 [1] 625; *B.* 36, 694 *C.* 1903 [1] 817).  
 \*5) Nitrit d.  $\delta$ -Oxy- $\beta$ -Methylbutan (*C. r.* 136, 1564 *C.* 1903 [2] 339).  
 \*9)  $\alpha$ -Amidovaleriansäure. Sm. 281—282° (*H.* 40, 566 *C.* 1904 [1] 591).  
 \*16)  $\alpha$ -Aethylamidopropionsäure (*Bl.* [3] 29, 1200 *C.* 1904 [1] 354; *C.* 1904 [2] 945).  
 \*18) Trimethylamidoessigsäure (Betaïn). (*HJ.* *J.* *C.* 1903 [2] 24; 1904 [2] 950).  
 \*26) Aethylester d. Aethylamidoameisensäure. Sd. 74—75°<sub>14</sub> (*B.* 36, 2476 *C.* 1903 [2] 559).  
 \*28) Isobutylester d. Amidoameisensäure. Sm. 64—65° (*B.* 36, 2475 *C.* 1903 [2] 559).  
 46) isom. Amidovaleriansäure (aus Pankreas) (*H.* 41, 395 *C.* 1904 [2] 137).  
 47) Methyl ester d.  $\alpha$ -Amidobuttersäure. HCl (*B.* 37, 1274 *C.* 1904 [1] 1334).
- $C_5H_{11}O_2N_3$  8) 4-Ureidomorpholin. Sm. 218° u. Zers. (*B.* 35, 4477 *C.* 1903 [1] 404).  
 $C_5H_{11}O_2Cl$  \*1)  $\alpha$ -Aethyläther d.  $\gamma$ -Chlor- $\alpha\beta$ -Dioxypropan. Sd. 85—88°<sub>30</sub> (*A.* 335, 240 *C.* 1904 [2] 1204).
- $C_5H_{11}O_3N$  \*5) Nitrat d.  $\delta$ -Oxy- $\beta$ -Methylbutan. Sd. 147—148° (*C. r.* 136, 1563 *C.* 1903 [2] 338).  
 18) 3-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroindol (*C.* 1903 [1] 34).  
 19) Amidooxyvaleriansäure +  $H_2O$ . Sm. 125° (*C.* 1904 [1] 260).
- $C_5H_{11}O_3N_3$  4)  $\alpha$ -Semicarbazidoisobuttersäure. Sm. 194° u. Zers. (*Am.* 28, 401 *C.* 1903 [1] 90).  
 5) Methyl ester d.  $\alpha$ -Semicarbazidopropionsäure. Sm. 100° (*Am.* 28, 398 *C.* 1903 [1] 90).
- $C_5H_{11}NS_2$  \*1) Dimethyläther d. Aethylimidodimerkaptomethan (*C. r.* 136, 452 *C.* 1903 [1] 699).  
 \*4) Diäthylamidodithioameisensäure. Diäthylaminsäure (*B.* 37, 3235 *C.* 1904 [2] 1153).  
 \*6) Aethylester d. Dimethylamidodithioameisensäure (*C. r.* 136, 452 *C.* 1903 [1] 699).  
 7) Diäthyläther d. Imidodimerkaptomethan. Sm. 33°. *HJ.* (*C.* 1903 [1] 19; *C. r.* 135, 976 *C.* 1903 [1] 139; *Bl.* [3] 29, 54 *C.* 1903 [1] 446).
- $C_5H_{11}N_3S$  2)  $\alpha$ -Amido- $\alpha$ -Methyl- $\beta$ -Allylthioharnstoff. Sm. 57° (*B.* 37, 2321 *C.* 1904 [2] 311).
- $C_5H_{12}ON_2$  17) d-sec. Butylharnstoff. Sm. 166° (*Ar.* 242, 69 *C.* 1904 [1] 999).  
 $C_5H_{12}O_2N_2$  \*6) r- $\alpha\delta$ -Diamidovaleriansäure (*C.* 1903 [2] 35).  
 10)  $\gamma\delta$ -Diamidovaleriansäure. (2HCl, PtCl<sub>4</sub>) (*C.* 1904 [1] 260).  
 11) Aethylester d.  $\alpha\beta$ -Diamidopropionsäure. 2HCl (*B.* 37, 1278 *C.* 1904 [1] 1335).
- $C_5H_{12}O_4S$  \*5) d- $\beta$ -Methylbutylschwefelsäure. Ba + 2H<sub>2</sub>O (*B.* 37, 1041 *C.* 1904 [1] 1248).  
 6) p-Oxy- $\beta$ -Methylbutan-p-Sulfonsäure. Ba + 2H<sub>2</sub>O (*C.* 1903 [2] 1164).  
 7) Aethylisopropylester d. Schwefelsäure. Sd. 105°<sub>15</sub> (*Am.* 30, 220 *C.* 1903 [2] 937).
- $C_5H_{12}NCl$  \*1) s-Chlor- $\alpha$ -Amidopentan. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 37, 2018 *C.* 1904 [2] 1237).

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- $C_5H_9N_3S$  11) d-sec. Butylthioharnstoff. Sm. 137° (*Ar.* 242, 59 *C.* 1904 [1] 999).
- $C_5H_9ON$  16)  $\beta$ -Hydroxylamido- $\beta$ -Methylbutan (tert. Amylhydroxylamin) (*H.* 36, 692 *C.* 1903 [1] 817).
- $C_5H_9O_3P$  5) Säure (aus Methylpropylketon). Fl. Pb (*C. r.* 136, 509 *C.* 1903 [1] 733).
- $C_5H_9O_4N$  6) Säure (aus Diäthylketon). Fl. Pb (*C. r.* 137, 124 *C.* 1903 [2] 553).  
C 39,7 — H 8,6 — O 42,4 — N 9,3 — M. G. 151.
- 1) *s*-Amido- $\alpha\beta\gamma\delta$ -Tetraoxypentan (Arabinamin). Sm. 98–99°, HCl, (2HCl, PtCl<sub>4</sub>), HJ, Pikrat, Oxalat (*C. r.* 136, 1079 *C.* 1903 [1] 1376; *C.* 1904 [1] 579).
- 2) isom. *s*-Amido- $\alpha\beta\gamma\delta$ -Tetraoxypentan (Xylamin). Fl. HCl, HJ (*C. r.* 136, 1081 *C.* 1903 [1] 1305; *C.* 1904 [1] 579).
- $C_5H_9O_4P$  \*1)  $\alpha$ -Oxyisoamylphosphinsäure. Sm. 191° (*C. r.* 136, 48 *C.* 1903 [1] 439).
- 5) Oxyphosphinsäure (aus d. Säure  $C_5H_9O_3P$ ). Sm. 108° (*C. r.* 137, 124 *C.* 1903 [2] 554).
- 6) Säure (aus Acetaldehyd). Sm. 132° (*C. r.* 138, 1709 *C.* 1904 [2] 424).
- 7) Säure (aus d. Säure  $C_5H_9O_3P$ ). Sm. 139–140° (*C. r.* 136, 509 *C.* 1903 [1] 773).
- $C_5H_9NBr_2$  \*1) Trimethyl- $\beta$ -Bromäthylammoniumbromid. Sm. 230–231° (*H.* 36, 2902 *C.* 1903 [2] 986).
- $C_5H_9NP_4$  1) Verbindung (aus Piperidin u. Phosphorwasserstoff) (*H.* 36, 4295 *C.* 1904 [1] 247).
- $C_5H_9ClS$  \*1) Methylidiäthylsulfinchlorid (*J. pr.* [2] 66, 454 *C.* 1903 [1] 561).
- $C_5H_{14}O_2N_2$  C 44,8 — H 10,4 — O 23,9 — N 20,9 — M. G. 134.
- 1) Sepsin.  $H_2SO_4$  (*C.* 1904 [2] 119).
- $C_5H_{14}NJ_6$  \*1) Trimethyläthylammoniumnonajodid. Sm. 67° (*J. pr.* [2] 67, 344 *C.* 1903 [1] 1297).
- $C_5H_{15}O_2N$  \*1) Cholin (*H.* 39, 162 *C.* 1903 [2] 591; *H.* 39, 526 *C.* 1903 [2] 1254; *A.* 330, 374 *C.* 1904 [1] 870).

## — 5 IV —

- $C_5H_4ONCl_3$  3) 2,3,5-Trichlor-4-Oxypyridin. Sm. 216–217° (*Soc.* 83, 404 *C.* 1903 [1] 1141).
- $C_5H_4O_4NCl$  1) Chlorid d. *p*-Nitrofuran-2-Carbonsäure. Sm. 38° (*C. r.* 137, 529 *C.* 1903 [2] 1069).
- $C_5H_5O_2NCl_2$  3) Methylimid d. Dichlormaleinsäure. Sm. 86° (*G.* 34 [1] 459 *C.* 1904 [2] 120; *G.* 34 [1] 489 *C.* 1904 [2] 453).
- $C_5H_5O_2NBr_2$  \*2) 3,4-Dibrompyrrol-2-Carbonsäure +  $H_2O$ . Sm. 110° (158° wasserfrei) (*B.* 37, 2800 *C.* 1904 [2] 533).
- $C_5H_5NCl_3Br$  1) 2,3,5-Trichlor-4-Brom-1-Methylpyrrol. Sm. 120° (*G.* 34 [1] 485 *C.* 1904 [2] 452).
- $C_5H_4ON_2Cl_2$  1) Methyläther d. 2,6-Dichlor-4-Oxy-1,3-Diazin. Sm. 51° (*B.* 36, 2234 *C.* 1903 [2] 449; *B.* 36, 3381 *C.* 1903 [2] 1192).
- $C_5H_4ON_2Br_2$  1) Amid d. 3,4-Dibrompyrrol-2-Carbonsäure +  $H_2O$ . Sm. 158° +  $C_5H_4O_2$  (*B.* 37, 2799 *C.* 1904 [2] 533).
- $C_5H_4ON_4S$  2) 2-Thiocarbonyl-6-Ketopurin. (*A.* 331, 77 *C.* 1904 [1] 1209).
- $C_5H_4O_2NCl$  2) Methylimid d. Chlormaleinsäure. Sm. 79° (*G.* 34 [1] 278 *C.* 1904 [2] 120).
- $C_5H_4O_2N_3S$  \*1) 8-Merkapto-2,6-Diketopurin (D.R.P. 141974 *C.* 1903 [2] 29; D.R.P. 142468 *C.* 1903 [2] 80).
- $C_5H_4N_2Cl_2S$  1) Methyläther d. 4,6-Dichlor-2-Merkapto-1,3-Diazin. Sm. 41 bis 42°; Sd. 135–136°<sub>14</sub> (*Am.* 32, 346 *C.* 1904 [2] 1414).
- $C_5H_5ON_3S_2$  1) Formylehrysean. Zers. oberh. 210° (*B.* 36, 3547 *C.* 1903 [2] 1376).
- $C_5H_5O_2NS$  \*1) Pyridin-3-Sulfonsäure (*M.* 24, 203 *C.* 1903 [2] 48; *C.* 1904 [2] 454).
- $C_5H_5O_3N_3S$  1) 2-Methyläther d. 5-Oximido-2-Merkapto-4,6-Diketo-3,4,5,6-Tetrahydro-1,3-Diazin. Zers. bei 180–200° (*Am.* 32, 350 *C.* 1904 [2] 1414).
- $C_5H_5O_3N_2Br$  1) 5-Brom-2,4,6-Triketo-5-Methylhexahydro-1,3-Diazin. Sm. 192,5° (*A.* 335, 359 *C.* 1904 [2] 1382).
- $C_5H_5NBrJ$  1) Pyridinbromojodid. Sm. 115–117°. HBr (*C. r.* 136, 1471 *C.* 1903 [2] 296).
- $C_5H_5ON_2S$  5) 4- oder 5-Acetylamidothiazol. Sm. 162° (*B.* 36, 3550 *C.* 1903 [2] 1379).

- $C_5H_6ON_2S$  6) 4-Acetyl-5-Methyl-1,2,3-Thiodiazol. Fl. +  $HgCl_2$  (A. 325, 175 C. 1903 [1] 646).  
7) Methyläther d. 2-Merkapto-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 198—199° (Am. 29, 483 C. 1903 [1] 1309.)
- $C_5H_6ON_3Cl$  1) Methyläther d. 6-Chlor-2-Amido-4-Oxy-1,3-Diazin. Sm. 168 bis 169° (B. 36, 3381 C. 1903 [2] 1192).
- $C_5H_6O_2NBr$  \*2) Aethylester d. Bromcyanessigsäure. Sd. 195—200°<sub>780</sub> (Am. 30, 466 C. 1904 [1] 378).
- $C_5H_6O_2N_2S$  6) 2-Thiocarbonyl-4,6-Diketo-5-Methylhexahydro-1,3-Diazin +  $H_2O$ . Sm. 244° (Am. 32, 352 C. 1904 [2] 1414).  
7) Methyläther d. 2-Merkapto-4,6-Diketo-3,4,5,6-Tetrahydro-1,3-Diazin. Sm. noch nicht bei 300° (Am. 32, 345 C. 1904 [2] 1413).
- $C_5H_6O_2N_2S_2$  1) Aethylester d. Isorhodanformylamidothioameisensäure (Hemi-thiourethan). Sm. 141—142° (Ser. 83, 87 C. 1903 [1] 230, 447).
- $C_5H_6O_2N_3Cl$  1) Dimethyläther d. 6-Chlor-2,4-Dioxy-1,3,5-Triazin. Sm. 81° (B. 36, 3195 C. 1903 [2] 956).
- $C_5H_6O_2N_4S$  1) 5-Formylamido-6-Amido-2-Thiocarbonyl-4-Keto-1,2,3,4-Tetrahydro-1,3-Diazin +  $H_2O$ . Na +  $2H_2O$  (A. 331, 76 C. 1904 [1] 1200).
- $C_5H_6O_3N_4S$  \*3)  $\gamma$ -Thiopseudoharnsäure. (5-Thioureido-2,4,6 Triketohexahydro-1,3-Diazin) (D.R.P. 141974 C. 1903 [2] 80).
- $C_5H_6O_3NBr$  1) Dimethylester d. Bromnitromalonsäure. Sd. 133°<sub>18</sub> (B. 37, 1779 C. 1904 [1] 1483).
- $C_5H_5N_3ClS$  1) Methyläther d. 6-Chlor-4-Amido-2-Merkapto-1,3-Diazin. Sm. 127—128° (Am. 32, 347 C. 1904 [2] 1414).
- $C_5H_7ONS_2$  2) 2-Thiocarbonyl-4-Keto-3-Aethyltetrahydrothiazol. Fl. (M. 25, 173 C. 1904 [1] 895).
- $C_5H_7ON_3S$  3) 4-[ $\alpha$ -Oximidoäthyl]-5-Methyl-1,2,3-Thiodiazol. Sm. 127° (A. 325, 176 C. 1903 [1] 1255).
- $C_5H_7ON_4Cl_2$  \*1) Dichlorporphyrexid. Sm. 116° u. Zers. (B. 36, 1290 C. 1903 [1] 1255).
- $C_5H_7ON_5S$  1) 4,6-Diamido-5-Formylamido-2-Merkapto-1,3-Diazin +  $H_2O$  (A. 331, 83 C. 1904 [1] 1200).
- $C_5H_7OClBr_2$  1) Chlorid d.  $\alpha,\delta$ -Dibrombutan- $\alpha$ -Carbonsäure. Sd. 122—127°<sub>13-15</sub> (B. 37, 2843 C. 1904 [2] 643).
- $C_5H_7O_2N_3S$  5) Methyläther d. 5-Amido-2-Merkapto-4,6-Diketo-3,4,5,6-Tetrahydro-1,3-Diazin. Sm. noch nicht bei 301° (Am. 32, 351 C. 1904 [2] 1414).  
6) 2,4-Dimethyläther d. 6-Merkapto-2,4-Dioxy-1,3,5-Triazin. Sm. 134° (u. 194°) (B. 36, 3196 C. 1903 [2] 956).
- $C_5H_7O_2N_3Se$  1)  $\alpha$ -Selenocyanpropionylharnstoff. Sm. 136° (Ar. 241, 196 C. 1903 [2] 103).  
2)  $\alpha$ -Methyl- $\beta$ -Selenocyanacetylharnstoff. Sm. 148—149° u. Zers. (A. r. 241, 190 C. 1903 [2] 103).
- $C_5H_7O_3NBr_2$  2)  $\alpha,\beta$ -Dibrompropionylamidoessigsäure. Sm. 147—148° (B. 37, 2509 C. 1904 [2] 427).
- $C_5H_8ON_2S$  \*5) 2-Thiocarbonyl-4-Keto-1,3-Dimethyltetrahydroimidazol. Sm. 94,5° (Bl. [3] 29, 1199 C. 1904 [1] 354).  
\*6) 2-Thiocarbonyl-5-Keto-1,4-Dimethyltetrahydroimidazol. Sm. 168—169° (Bl. [3] 29, 1194 C. 1904 [1] 361).
- $C_5H_8ON_4Cl$  \*1) Chlorporphyrexid (B. 36, 1291 C. 1903 [1] 1255).  
2) isom. Chlorporphyrexid. Sm. 151,5° (B. 36, 1289 C. 1903 [1] 1255).
- $C_5H_8O_3NCl$  \*1) Aethylester d. Chloracetylamidoameisensäure. Sm. 130° (B. 36, 745 C. 1903 [1] 827).  
2)  $\alpha$ -Chloracetylamidopropionsäure. Sm. 125—127° (B. 37, 2490 C. 1904 [2] 424).  
3) Chlorid d. Amidoessigsäure-N-Carbonsäureäthylester (Carb-äthoxylglycinchlorid). Fl. (B. 36, 2109 C. 1903 [2] 345).
- $C_5H_8N_3JS_2$  1) Jodmethylat d. Chrysean. Zers. bei 180° (B. 36, 3546 C. 1903 [2] 1378).
- $C_5H_9ONCl_2$  1)  $\beta\gamma$ -Dichlor- $\gamma$ -Nitroso- $\beta$ -Methylbutan. Sm. 119—120° (B. 37, 543 C. 1904 [1] 865).

- $C_5H_9ONS_2$  \*1) Aethylester d. Acetylamidodithioameisensäure. Sm. 123° (*Bl.* [3] 29, 51 *C.* 1903 [1] 446).  
 3) Methylester d. Acetylmethylamidodithioameisensäure. Sd. 156 bis 158°<sub>32</sub> (*Bl.* [3] 29, 60 *C.* 1903 [1] 447).
- $C_5H_9ON_2S$  2) 5-Imido-2-Thiocarbonyl-3-Oxy-4,4-Dimethyltetrahydroimidazol. Sm. 231° u. Zers. (*B.* 34, 1877; *B.* 36, 1289 *C.* 1903 [1] 1255).
- $C_5H_9O_2NF_2$  1) Aethylester d.  $\beta\beta$ -Difluoräthylamidoameisensäure. Sm. 37,6°; Sd. 184—185,5° (*C.* 1904 [2] 945).
- $C_5H_9O_4N_2Br$  1) Nitrat d.  $\gamma$ -Brom- $\gamma$ -Nitroso- $\beta$ -Oxy- $\beta$ -Methylbutan (*B.* 36, 1771 *C.* 1903 [2] 101).
- $C_5H_9O_5N_2Br$  1) Nitrat d.  $\gamma$ -Brom- $\gamma$ -Nitro- $\beta$ -Oxy- $\beta$ -Methylbutan. Sm. 226° u. Zers. (*B.* 36, 1772 *C.* 1903 [2] 101).
- $C_5H_{10}ONCl$  \*3) Chlorid d. Diäthylamidoameisensäure. Sd. 187—190° (*Bl.* [3] 31, 689 *C.* 1904 [2] 198).
- $C_5H_{10}ONBr$  3)  $\beta$ -Brom- $\gamma$ -Nitroso- $\beta$ -Methylbutan. Fl. (*B.* 37, 536 *C.* 1904 [1] 864).  
 4)  $\beta$ -Brom- $\gamma$ -Oximido- $\beta$ -Methylbutan. Sm. 78—79° (*B.* 37, 539 *C.* 1904 [1] 864).
- $C_5H_{10}O_3N_2S$  3) Aethylester d. Thioureidoessigsäure. Sm. 65° (*A.* 327, 371 *C.* 1903 [2] 660).
- $C_5H_{10}NCl_2P$  \*1) 1-Piperidylldichlorphosphin. Sd. 94—95°<sub>10</sub> (*A.* 326, 157 *C.* 1903 [1] 761).
- $C_5H_{11}OCSl_2$  \*1) Methyloxydiäthylendisulfinchlorid (*J. pr.* [2] 66, 464 *C.* 1903 [1] 561).
- $C_5H_{11}O_2ClS$  \*1) Methyläthylthetinchlorid. + 6HgCl<sub>2</sub> (*J. pr.* [2] 66, 465 *C.* 1903 [1] 561).
- $C_5H_{11}NCl_2S$  1) Amylmonamid d. Thiophosphorsäuredichlorid. Sd. 140°<sub>16</sub> (*A.* 326, 205 *C.* 1903 [1] 821).
- $C_5H_{12}NCl_2P$  1) Amylamidodichlorphosphin. Sd. 101°<sub>8</sub> (*A.* 325, 150 *C.* 1903 [1] 760).
- $C_5H_{13}ON_2J$  1) Jodmethylat d. 4-Amidomorpholin. Sm. 170—171° (*B.* 35, 4477 *C.* 1903 [1] 404).
- $C_5H_{13}O_3NS$  4)  $\alpha$ -Diäthylamidomethan- $\alpha$ -Sulfonsäure. Na (*B.* 37, 4087 *C.* 1904 [2] 1724).
- $C_5H_{14}ONCl$  \*1) Cholinechlorid. 2 + PtCl<sub>4</sub>, + AnCl<sub>3</sub> (*B.* 36, 2903 *C.* 1903 [2] 986).  
 \*2) Methyläther d. Oxytetramethylammoniumchlorid. 2 + PtCl<sub>4</sub> (*A.* 334, 12 *C.* 1904 [2] 947).
- $C_5H_{14}ONBr$  \*1) Cholinbromid (*B.* 36, 2903 *C.* 1903 [2] 986).  
 2) Trimethyl- $\beta$ -Bromäthylammoniumhydroxyd. Bromid, Pikrat (*B.* 36, 2902 *C.* 1903 [2] 986).

- $C_5H_9O_2NClBr$  1) Methylimid d. Chlorbrommaleinsäure. Sm. 103° (*G.* 34 [1] 487 *C.* 1904 [2] 452).
- $C_5H_4O_5NClS$  1) 3-Amid d. 5-Chlorfuran-2-Carbonsäure-3-Sulfonsäure. Sm. 194—195°. K, Ca + 6H<sub>2</sub>O, Ba + 3H<sub>2</sub>O, Pb + H<sub>2</sub>O, Ag (*Am.* 32, 209 *C.* 1904 [2] 1140).
- $C_5H_4O_5NBrS$  1) 3-Amid d. 5-Bromfuran-2-Carbonsäure-3-Sulfonsäure. Sm. 190—191°. K + H<sub>2</sub>O, Ba + 3H<sub>2</sub>O, Pb + 2H<sub>2</sub>O, Ag + 1½ H<sub>2</sub>O (*Am.* 32, 222 *C.* 1904 [2] 1140).
- $C_5H_5O_4N_2ClS$  1) Diamid d. 5-Chlorfuran-2-Carbonsäure-3-Sulfonsäure. Sm. 212° (*Am.* 32, 206 *C.* 1904 [2] 1139).
- $C_5H_5O_4N_2BrS$  1) Diamid d. 5-Bromfuran-2-Carbonsäure-3-Sulfonsäure. Sm. 219—220° (*Am.* 32, 219 *C.* 1904 [2] 1140).
- $C_5H_5O_5NBrS$  1) Amid d. 5-Brom-2-Methylfuran-4-Sulfonsäure. Sm. 123° (*Am.* 32, 199 *C.* 1904 [2] 1139).
- $C_5H_{10}ONCl_2P$  1) Dichlorid d. 1-Piperidylphosphinsäure. Sd. 257° (*A.* 326, 186 *C.* 1903 [1] 820).
- $C_5H_{10}NCl_2SP$  1) Dichlorid d. 1-Piperidylthiophosphinsäure. Sd. 146—149°<sub>11</sub> (*A.* 326, 213 *C.* 1903 [1] 822).
- $C_5H_{12}ONCl_2P$  1) Amylmonamid d. Phosphorsäuredichlorid. Sd. 159°<sub>17</sub> (*A.* 326, 174 *C.* 1903 [1] 819).

**C<sub>6</sub>-Gruppe.**

- C<sub>6</sub>H<sub>8</sub>** \*2) 1,2-Dihydrobenzol. Sd. 81,5° (A. 328, 105 C. 1903 [2] 244; C. 1904 [2] 440; Soc. 85, 1417 C. 1904 [2] 1736).  
 \*3) 1,4-Dihydrobenzol. Sd. 81,5° (A. 328, 107 C. 1903 [2] 244).  
**C<sub>6</sub>H<sub>10</sub>** \*9) Diallyl (C. 1903 [2] 339).  
**C<sub>6</sub>Cl<sub>6</sub>** \*1) Hexachlorbenzol (C. 1903 [1] 870).

## — 6 II —

- C<sub>6</sub>H<sub>2</sub>Br<sub>4</sub>** \*1) 1,2,3,5-Tetrabrombenzol. Sm. 98° (A. 330, 55 C. 1904 [1] 1142).  
**C<sub>6</sub>H<sub>4</sub>O<sub>2</sub>** \*2) 1,4-Benzochinon (G. 33 [1] 164).  
 5) Säure (aus p-Kresol). = (C<sub>6</sub>H<sub>4</sub>O<sub>2</sub>)<sub>x</sub>. Sm. noch nicht bei 320° (B. 36, 2032 C. 1903 [2] 360).  
**C<sub>6</sub>H<sub>4</sub>O<sub>6</sub>** \*4) βγ-Anhydrid d. Propen-αβγ-Tricarbonsäure (Akonitanhydridsäure). Sm. 76° (B. 37, 3968 C. 1904 [2] 1604).  
**C<sub>6</sub>H<sub>4</sub>J<sub>2</sub>** \*2) 1,3-Dijodbenzol. Sm. 38° (B. 37, 1301 C. 1904 [1] 1339).  
**C<sub>6</sub>H<sub>5</sub>Cl** \*1) Chlorbenzol. Sd. 131—132° (C. r. 135, 1121 C. 1903 [1] 283; B. 36, 1230 C. 1903 [1] 1218).  
**C<sub>6</sub>H<sub>5</sub>Na** 1) Natriumphenyl (Am. 29, 589 C. 1903 [2] 195).  
**C<sub>6</sub>H<sub>5</sub>O** \*1) Oxybenzol. + H<sub>3</sub>PO<sub>4</sub> (Sm. 61—69°) (R. 21, 354 C. 1903 [1] 151; J. pr. [2] 68, 486 C. 1904 [1] 444).  
**C<sub>6</sub>H<sub>5</sub>O<sub>2</sub>** \*2) 1,2-Dioxybenzol (B. 35, 4324 C. 1903 [1] 285; J. pr. [2] 68, 486 C. 1904 [1] 444).  
 \*4) 1,4-Dioxybenzol. + H<sub>3</sub>PO<sub>4</sub> (R. 21, 355 C. 1903 [1] 151; J. pr. [2] 68, 486 C. 1904 [1] 444).  
**C<sub>6</sub>H<sub>6</sub>O<sub>3</sub>** \*3) 1,3,5-Trioxymethylbenzol (Ar. 242, 462 C. 1904 [2] 783).  
 \*5) Maltol (Larixinsäure). Sm. 159° (A. 123, 191; B. 36, 3407 C. 1903 [2] 1280).  
 \*16) Anhydrid d. β-Buten-βγ-Dicarbonsäure (B. 37, 1614 C. 1904 [1] 1402).  
 \*18) Aldehyd d. 4-Oxy-2-Methylfuran-5-Carbonsäure (B. 37, 303 C. 1904 [1] 648).  
 20) 2-Methylfuran-3-Carbonsäure. Sm. 102—103° (C. 1904 [1] 956).  
 21) Methylester d. Isobrenzschleimsäure. Sm. 60°; Sd. 130—135°<sub>20</sub> (C. r. 137, 992 C. 1904 [1] 291).  
**C<sub>6</sub>H<sub>6</sub>O<sub>4</sub>** \*8) 2-Oxymethylfuran-5-Carbonsäure. Sm. 165—167° (B. 36, 2590 C. 1903 [2] 618).  
 16) 1,2,3,4-Tetraoxybenzol (Apionol). Sm. 161° (B. 37, 119 C. 1904 [1] 586).  
 17) αγ-Lakton d. γ-Oxy-α-Buten-αβ-Dicarbonsäure. Sm. 159,5—160° (Ca, Ba (A. 331, 141 C. 1904 [1] 933)).  
**C<sub>6</sub>H<sub>6</sub>O<sub>5</sub>** \*9) αγ-Lakton d. α-Keto-γ-Oxybutan-αγ-Dicarbonsäure. Na + NaHSO<sub>3</sub> + 7H<sub>2</sub>O (R. 21, 153 C. 1904 [2] 194).  
 10) Pentaoxybenzol (C. 1903 [2] 830; B. 37, 122 C. 1904 [1] 586).  
 11) d-2,5-Dihydrofuran-2,5-Dicarbonsäure + H<sub>2</sub>O. Sm. 144° (wasserfrei). Ba + 1½ H<sub>2</sub>O, Pb + 2H<sub>2</sub>O (B. 37, 2539 C. 1904 [2] 530).  
 12) l-2,5-Dihydrofuran-2,5-Dicarbonsäure + H<sub>2</sub>O. Sm. 144° (wasserfrei). Ba + 1½ H<sub>2</sub>O, Pb + 2H<sub>2</sub>O (B. 37, 2539 C. 1904 [2] 531).  
 13) αγ-Lakton d. βγ-Dioxypropen-αα-Dicarbonsäuremonomethylester (Tetron-α-Carbonsäuremethylester). Sm. 171—173° u. Zers. NH<sub>4</sub>, Methylaminsalz (B. 36, 469 C. 1903 [1] 626).  
**C<sub>6</sub>H<sub>6</sub>O<sub>6</sub>** \*6) Akonitsäure. Sm. 155—166° (A. 327, 237 C. 1903 [1] 1406).  
 \*9) cis-R-Trimethylen-1,2,3-Tricarbonsäure. Ag<sub>3</sub> (J. pr. [2] 68, 166 C. 1903 [2] 760).  
 \*10) trans-R-Trimethylen-1,2,3-Tricarbonsäure. Sm. 218—219° (B. 36, 3509 C. 1903 [2] 1274; B. 36, 3781 C. 1904 [1] 42).  
 22) r-Diformaltraubensäure (R. 21, 374 C. 1903 [1] 138).  
**C<sub>6</sub>H<sub>6</sub>O<sub>7</sub>** C 32,4 — H 2,7 — O 64,9 — M. G. 222.  
 1) Benzoltriozonid (Ozobenzol). Zers. bei 50° (C. r. 76, 572; B. 14, 975; A. 170, 123; Bl. [3] 13, 940; B. 37, 3431 C. 1904 [2] 1111). — \*II, 17.  
**C<sub>6</sub>H<sub>6</sub>N<sub>2</sub>** 3) 1,4-Diimido-1,4-Dihydrobenzol. Zers. bei 50—60°. 2HCl, HBr (Am. 31, 218 C. 1904 [1] 1073; B. 37, 1499 C. 1904 [1] 1413; B. 37, 2912 C. 1904 [2] 1458).  
 4) Verbindung (aus 1,4-Diamidobenzol) = (C<sub>6</sub>H<sub>6</sub>N<sub>2</sub>)<sub>n</sub>. Sm. 230—231° (238 bis 238,5 u. Zers.; 242—243°) (M. 10, 124; B. 27, 480; B. 37, 1506 C. 1904 [1] 1414; B. 37, 2907 C. 1904 [2] 1458). — IV, 595.

- $C_6H_5Cl_2$  1) 3,5-Dichlor-1,2-Dihydrobenzol. *Sd.* 88—90°<sub>29</sub> (*Soc.* 83, 501 *C.* 1903 [1] 1028, 1352).
- $C_6H_5Br_2$  1) 3,5-Dibrom-1,2-Dihydrobenzol<sup>1)</sup> *Sm.* 104,5° (*Soc.* 83, 502 *C.* 1903 [1] 1028, 1352).
- $C_6H_5S$  \*1) Merkapto benzol (*Bl.* [3] 29, 692 *C.* 1903 [2] 565; *Bl.* [3] 29, 762 *C.* 1903 [2] 620; *Am.* 31, 572 *C.* 1904 [2] 98; *B.* 37, 3274 *C.* 1904 [2] 1295).
- $C_6H_5Se$  \*1) Selenobenzol. *Sd.* 182° (*Bl.* [3] 29, 763 *C.* 1903 [2] 620).
- $C_6H_7N$  \*1) Anilin (*A.* 327, 108 *C.* 1903 [1] 1213).
- \*2) 2-Methylpyridin. *Sd.* 128,8°<sub>780</sub> (*C.* 1903 [1] 399; *Am.* 29, 3 *C.* 1903 [1] 524).
- \*3) 3-Methylpyridin. *Sd.* 143,4°<sub>780</sub> (*Am.* 29, 4 *C.* 1903 [1] 524).
- \*4) 4-Methylpyridin. *Sd.* 143,1°<sub>780</sub> (*Am.* 29, 6 *C.* 1903 [1] 524).
- $C_6H_8O_2$  \*8) Sorbinsäure. *K, Ba* (*C.* 1903 [2] 556).
- \*10)  $\alpha$ -Pentin- $\alpha$ -Carbonsäure. *Sm.* 25°; *Sd.* 126—127°<sub>24</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).
- 20) 2-Keto-1-Oxymethylen-R-Pentamethylen. *Sm.* 72—73°; *Sd.* 80—110°<sub>40</sub> (*A.* 329, 114 *C.* 1903 [2] 1322).
- 21)  $\gamma$ -Methyl- $\alpha$ -Butin- $\alpha$ -Carbonsäure. *Sm.* 36—38°; *Sd.* 114—115°<sub>18</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).
- $C_6H_8O_4$  \*9)  $\alpha$ -Buten- $\alpha\beta$ -Dicarbonsäure. *Sm.* 194—196° (*A.* 331, 123 *C.* 1904 [1] 932; *B.* 37, 2384 *C.* 1904 [2] 306).
- \*10)  $\alpha$ -Buten- $\alpha\beta$ -Dicarbonsäure. *Sm.* 100 (*J. pr.* [2] 68, 160 *C.* 1903 [2] 759).
- \*16)  $\beta$ -Buten- $\alpha\beta$ -Dicarbonsäure. *Sm.* 166—167° (*A.* 330, 307 *C.* 1904 [1] 927; *B.* 37, 2384 *C.* 1904 [2] 306).
- \*17)  $\beta$ -Buten- $\alpha\delta$ -Dicarbonsäure. *Ag<sub>2</sub>* (*Soc.* 85, 613 *C.* 1904 [1] 1553).
- \*30)  $\alpha\gamma$ -Lakton d.  $\gamma$ -Oxybutan- $\alpha\beta$ -Dicarbonsäure. *Sm.* 78—79° (*A.* 330, 312 *C.* 1904 [1] 927).
- \*48)  $\alpha$ -Buten- $\beta\delta$ -Dicarbonsäure. *Sm.* 133,5° (130—131°). *Ba* + 2H<sub>2</sub>O (*M.* 11, 513; *B.* 36, 1202 *C.* 1903 [1] 1175).
- 49) cis-1-Methyl-R-Trimethylen-2,3-Dicarbonsäure. *Sm.* 108° (*B.* 36, 1087 *C.* 1903 [1] 1126).
- 50) trans-1-Methyl-R-Trimethylen-2,3-Dicarbonsäure. *Fl.* *Ag<sub>2</sub>* + 1/2 H<sub>2</sub>O (*J. pr.* [2] 68, 159 *C.* 1903 [2] 759).
- 51)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxybutan- $\beta\gamma$ -Dicarbonsäure. *Sm.* 104° *Zn* (*B.* 37, 1613 *C.* 1904 [1] 1402).
- 52) Äthylester d.  $\alpha\beta$ -Diketobuttersäure. *Sd.* 70°<sub>19</sub> + 1/2 H<sub>2</sub>O (*Sm.* 120°) (*C. r.* 138, 1222 *C.* 1904 [2] 27).
- 53)  $\beta$ -Ketopropylester d. Brenztraubensäure. *Sm.* 152—153° (*C.* 1904 [2] 302).
- $C_6H_8O_6$  \*2) Tricarballälsäure (*C. r.* 136, 1332 *C.* 1903 [2] 107; *J. pr.* [2] 68, 165 *C.* 1903 [2] 760).
- \*5) Parabrenztraubensäure. *Ba* (*R.* 21, 299 *C.* 1903 [1] 17).
- \*10) Metabrenztraubensäure. *Ba* (*R.* 21, 302 *C.* 1903 [1] 17).
- 13) Lakton d. Parasaccharonsäure. (Parasaccharon). *Sm.* 159—160° (*B.* 37, 3613 *C.* 1904 [2] 1454).
- $C_6H_8O_7$  \*2) Citronensäure. *Rb<sub>2</sub>* (*C.* 1903 [1] 810; *C. r.* 135, 1352 *C.* 1903 [1] 320; *B.* 36, 3599 *C.* 1903 [2] 1317).
- $C_6H_8O_8$  \*1)  $\alpha\beta$ -Dioxypropan- $\alpha\beta\gamma$ -Tricarbonsäure + H<sub>2</sub>O. *Sm.* 159—160°. *K<sub>2</sub>* + 4H<sub>2</sub>O, *Ca<sub>3</sub>* + 4H<sub>2</sub>O, *Ca<sub>3</sub>* + 18H<sub>2</sub>O, *Cu<sub>3</sub>* + 2H<sub>2</sub>O (*B.* 37, 3614 *C.* 1904 [2] 1454).
- $C_6H_8N_2$  \*3) 1,4-Diamidobenzol (*B.* 36, 3827 *C.* 1904 [1] 19; *B.* 37, 2776 *C.* 1904 [2] 773; *B.* 37, 2906 *C.* 1904 [2] 1458).
- \*4) Phenylhydrazin (*B.* 35, 4178 *C.* 1903 [1] 144; *C. r.* 137, 330 *C.* 1903 [2] 716).
- 17) Pyrazol (aus 2-Semicarbazol-1-Oxymethylen-R-Pentamethylen). *Sm.* 57—59° (*A.* 329, 116 *C.* 1903 [2] 1322).
- 18) 3,6-Dimethyl-1,2-Diazin. *Sm.* 24—33°. *HCl*, (*HCl*, *AuCl<sub>3</sub>*), (2*HCl*, *AuCl<sub>3</sub>*) (*B.* 36, 503 *C.* 1903 [1] 654).
- $C_6H_8Cl_4$  2) isom. Tetrachlorhexahydrobenzol. *Sm.* 173° (*C. r.* 137, 242 *C.* 1903 [2] 665).
- 3) isom. Tetrachlorhexahydrobenzol. *Sd.* 170,5—172,5°<sub>80</sub> (*C. r.* 137, 242 *C.* 1903 [2] 665).
- $C_6H_8Br_2$  7) 1,4-Dibrom-1,2,3,4-Tetrahydrobenzol. *Sm.* 108° (*C.* 1904 [2] 440; *Soc.* 85, 1412 *C.* 1904 [2] 1736).

- C<sub>6</sub>H<sub>3</sub>Br<sub>2</sub>** 8) *p*-Dibrom-1,2,3,4-Tetrahydrobenzol. Sm. 116—117°<sub>29</sub> (*C.* 1904 [2] 440).
- C<sub>6</sub>H<sub>3</sub>N<sub>3</sub>** \*7) Nitril d.  $\alpha\alpha'$ -Imidodipropionsäure (*Bl.* [3] 29, 1180 *C.* 1904 [1] 353).
- 11) Di[Cyanmethyl]äthylamin. (Nitril d. Aethylimidodiessigsäure). Sm. 141°<sub>18</sub> HCl (*B.* 37, 4092 *C.* 1904 [2] 1725).
- C<sub>6</sub>H<sub>3</sub>Cl<sub>3</sub>** 2) 1,3,5-Trichlorhexahydrobenzol? Sm. 66; Sd. 233°<sub>745</sub> (*C. r.* 137, 242 *C.* 1903 [2] 665).
- 3) isom. Trichlorhexahydrobenzol. Sd. 221°<sub>745</sub> u. Zers. (*C. r.* 137, 242 *C.* 1903 [2] 665).
- 4) isom. Trichlorhexahydrobenzol. Sd. 226°<sub>745</sub> u. Zers. (*C. r.* 137, 242 *C.* 1903 [2] 665).
- C<sub>6</sub>H<sub>3</sub>Br** 1) l-Brom-1,2,3,4-Tetrahydrobenzol. Sd. 74°<sub>28</sub> (*Soc.* 85, 1422 *C.* 1904 [2] 1736).
- C<sub>6</sub>H<sub>10</sub>O** \*6)  $\delta$ -Keto- $\beta$ -Methyl- $\beta$ -Penten (*M.* 24, 770 *C.* 1904 [1] 158).
- \*7) R-Ketohexamethylen. Sd. 161° (*C. r.* 137, 1026 *C.* 1904 [1] 280).
- \*8) 2-Keto-1-Methyl-R-Pentamethylen. Sd. 140—141° (*A.* 331, 322 *C.* 1904 [1] 1567).
- 17) Hexahydrobenzol-1,2-Oxyd. Sd. 131,5°<sub>760</sub> (*C. r.* 137, 62 *C.* 1903 [2] 570).
- C<sub>6</sub>H<sub>10</sub>O<sub>2</sub>** \*10)  $\alpha$ -Penten- $\alpha$ -Carbonsäure (*A.* 334, 207 *C.* 1904 [2] 884).
- \*12)  $\alpha$ -Penten- $\epsilon$ -Carbonsäure. Sd. 203° (*B.* 37, 1999 *C.* 1904 [2] 23; *A.* 334, 208 *C.* 1904 [2] 884).
- \*13)  $\beta$ -Penten- $\alpha$ -Carbonsäure (*A.* 334, 207 *C.* 1904 [2] 884).
- \*14)  $\beta$ -Penten- $\beta$ -Carbonsäure. Sm. 24—25°, Sd. 213° (*M.* 24, 156 *C.* 1903 [1] 956; *B.* 37, 1617 *C.* 1904 [1] 1403; *A.* 334, 206 *C.* 1904 [2] 884).
- \*15)  $\beta$ -Penten- $\gamma$ -Carbonsäure. ( $\alpha$ -Aethylcrotonsäure). Ca + 5H<sub>2</sub>O (*A.* 334, 104 *C.* 1904 [2] 888).
- \*16)  $\beta$ -Penten- $\epsilon$ -Carbonsäure (*B.* 37, 1999 *C.* 1904 [2] 23; *A.* 334, 208 *C.* 1904 [2] 884).
- \*19) Brenzterebinsäure. Sd. 110—111°<sub>22</sub> (*C. r.* 136, 1464 *C.* 1903 [2] 282; *C. r.* 139, 293 *C.* 1904 [2] 692).
- \*30) Lakton d.  $\gamma$ -Oxyisocaproonsäure. Sd. 202—203° (*C. r.* 136, 1464 *C.* 1903 [2] 282; *C. r.* 139, 293 *C.* 1904 [2] 692).
- \*52)  $\gamma$ -Methyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Ca + 5H<sub>2</sub>O (*C. r.* 139, 293 *C.* 1904 [2] 692).
- 55)  $\alpha$ -Penten- $\delta$ -Carbonsäure (*A.* 334, 207 *C.* 1904 [2] 884).
- 56)  $\beta$ -Penten- $\delta$ -Carbonsäure. Sd. 198—199°<sub>740</sub>. Ca (*B.* 37, 1617 *C.* 1904 [1] 1403; *A.* 334, 206 *C.* 1904 [2] 884).
- 57) isom.  $\beta$ -Penten- $\gamma$ -Carbonsäure ( $\alpha$ -Aethylisocrotonsäure). Sd. 199,5°<sub>750</sub>. Ca + 2H<sub>2</sub>O (*A.* 334, 103 *C.* 1904 [2] 888).
- 58) Keton (aus d. Verb. C<sub>6</sub>H<sub>10</sub>O<sub>2</sub>). Sd. 70—75°<sub>15</sub> (*C. r.* 137, 1205 *C.* 1904 [1] 356).
- 59) Lakton d.  $\gamma$ -Oxy- $\beta$ -Methylvaleriansäure. Sd. 213° (*Bl.* [3] 29, 335 *C.* 1903 [1] 1216).
- 60) Lakton d.  $\delta$ -Oxy- $\beta$ -Methylvaleriansäure. Sd. 104—108°<sub>18-14</sub> (*B.* 36, 1205 *C.* 1903 [1] 1176).
- 61) Lakton d.  $\gamma$ -Oxy- $\beta$ -Aethylbuttersäure. Sd. 218—219° (*B.* 36, 1204 *C.* 1903 [1] 1176).
- 62) Lakton (aus  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäurediäthylester). Sd. 201—202° (*C. r.* 138, 580 *C.* 1904 [1] 925).
- 63) Verbindung (aus Epichlorhydrin u. Acetylacetonatrium). Sd. 81—82°<sub>15</sub> (*C. r.* 137, 1204 *C.* 1904 [1] 356).
- C<sub>6</sub>H<sub>10</sub>O<sub>3</sub>** \*1) Glycerinäther ( $\beta$ -Akroleinglycerin). Sd. 170—171° (*A.* 335, 224 *C.* 1904 [2] 1203).
- \*7)  $\beta$ -Ketopentan- $\epsilon$ -Carbonsäure. Ag (*A.* 331, 324 *C.* 1904 [1] 1567).
- \*11)  $\alpha$ -Keto- $\beta\beta$ -Dimethylpropan- $\alpha$ -Carbonsäure. Sm. 82° (*A.* 327, 205 *C.* 1903 [1] 1407).
- \*26) Aetylerster d.  $\alpha$ -Ketopropan- $\alpha$ -Carbonsäure. Sd. 162°<sub>760</sub> (*Bl.* [3] 31, 1149 *C.* 1904 [2] 1706).
- \*28) Aethylester d. Acetessigsäure (*B.* 36, 1834 *C.* 1903 [2] 191; *B.* 37, 591 *C.* 1904 [1] 867; *B.* 37, 3451 *C.* 1904 [2] 1274; *B.* 37, 3488 *C.* 1904 [2] 1288).
- 41)  $\alpha\beta$ -Aethylidenäther d.  $\alpha\beta\gamma$ -Trioxypentan ( $\alpha$ -Akroleinglycerin). Sd. 102—116°<sub>17</sub> (*A.* 335, 216 *C.* 1904 [2] 1202).
- 42) Aether d.  $\gamma$ -Oxy- $\alpha\beta$ -Propanoxyd (Diglycidäther). Sd. 103°<sub>22</sub> (*A.* 335, 238 *C.* 1904 [2] 1204).

- $C_6H_{10}O_8$  43) Peroxyd (aus Mesityloxyd) (*B.* 36, 1933 *C.* 1903 [2] 189).  
 44)  $\delta$ -Oxy- $\beta$ -Penten- $\epsilon$ -Carbonsäure. Fl. Ba (*C.* 1903 [2] 556).  
 45) 3-Oxy-1,1-Dimethyl-R-Trimethylen-2-Carbonsäure? Sm. 119–120° (*Soc.* 83, 858 *C.* 1903 [2] 572).  
 46)  $\delta$ -Keto- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. –1,5°; Sd. 84–85°<sub>15</sub> (*Bl.* [3] 31, 1151 *C.* 1904 [2] 1707).  
 47) Laktone d.  $\alpha\gamma$ -Dioxy- $\beta\beta$ -Dimethylpropan- $\alpha$ -Carbonsäure. Sm. 55° (*M.* 25, 48 *C.* 1904 [1] 717).  
 48) Isobutylester d. Glyoxylsäure. Sd. 75–80°<sub>15</sub> (*Bl.* [3] 31, 681 *C.* 1904 [2] 195).
- $C_6H_{10}O_4$  \*10) Butan- $\alpha\delta$ -Dicarbonsäure (*Bl.* [3] 29, 1038 *C.* 1903 [2] 1424).  
 \*15)  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 140°.  $Ag_2$  (*A.* 329, 91 *C.* 1903 [2] 1071).  
 \*16)  $\beta$ -Methylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 85–86°.  $Ag_2$  (*A.* 329, 103 *C.* 1903 [2] 1071).  
 \*29) Diäthylester d. Oxalsäure. +  $AlCl_3$  (*Soc.* 85, 1107 *C.* 1904 [2] 976).  
 34) Dulcid. Sd. 198°<sub>18</sub> (*C. r.* 139, 637 *C.* 1904 [2] 1536).  
 35) Peroxyd d. Propionsäure. Fl. (*Am.* 29, 191 *C.* 1903 [1] 959).  
 36) isom.  $\beta$ -Monomethylester d. Propan- $\alpha\beta$ -Dicarbonsäure. Sd. 140°<sub>11</sub>.  $Ag$  (*Soc.* 85, 542 *C.* 1904 [1] 1484).  
 37) Monomethylester d. Propan- $\beta\beta$ -Dicarbonsäure. Fl. (*Soc.* 83, 1240 *C.* 1903 [2] 1420).
- $C_6H_{10}O_5$  \*9) Cellulose (*C.* 1904 [1] 1069).  
 \*100) Parasaccharin (*B.* 37, 1196 *C.* 1904 [1] 1196).  
 104) Salepschleim (*B.* 36, 3200 *C.* 1903 [2] 1054).  
 105)  $\alpha$ -Oxybutan- $\alpha\beta$ -Dicarbonsäure. Sm. 108–109° (133–134°) (*B.* 35, 4372 *C.* 1903 [1] 281; *B.* 37, 2382 *C.* 1904 [2] 306).  
 106)  $\alpha$ -Oxybutan- $\beta\gamma$ -Dicarbonsäure. Ca (*B.* 37, 1614 *C.* 1904 [1] 1402).  
 107) Laktone d. Fukonsäure. Sm. 106–107° (*B.* 37, 308 *C.* 1904 [1] 649).
- $C_6H_{10}O_8$  \*7) 3,4-Dioxy-2-Oxymethyltetrahydrofuran-5-Carbonsäure (Chitarsäure). Ca + 4H<sub>2</sub>O (*B.* 35, 4016 *C.* 1903 [1] 391; *B.* 36, 2587 *C.* 1903 [2] 617).  
 \*19) Monoäthylester d. d-Weinsäure. K (*Soc.* 85, 1123 *C.* 1904 [2] 1206).  
 29) i- $\alpha\delta$ -Dioxybutan- $\alpha\delta$ -Dicarbonsäure. Sm. 132–134° (*B.* 37, 2092 *C.* 1904 [2] 23).  
 30) r- $\alpha\delta$ -Dioxybutan- $\alpha\delta$ -Dicarbonsäure. Sm. 173° (*B.* 37, 2092 *C.* 1904 [2] 23).  
 31) isom. 3,4-Dioxy-2-Oxymethyltetrahydrofuran-5-Carbonsäure (Chitonsäure). Fl. Ca + 2H<sub>2</sub>O (*B.* 27, 139; *B.* 36, 2587 *C.* 1903 [2] 617). — \*I, 426.  
 32) isom. Dimethylester d. d-Weinsäure. Sm. 61,5° (*Soc.* 85, 765 *C.* 1904 [2] 512).
- $C_6H_{10}O_7$  \*5) d-Glykuronsäure (*H.* 41, 243 *C.* 1904 [1] 1095).  
 \*7) Oxyglykuronsäure. Ca + 3H<sub>2</sub>O (*C.* 1904 [2] 1291).  
 10) Parasaccharonsäure. Ca + 5H<sub>2</sub>O, Cu + H<sub>2</sub>O (*B.* 37, 3613 *C.* 1904 [2] 1454).
- $C_6H_{10}O_8$  \*1) Schleimsäure (*C.* 1903 [2] 712).
- $C_6H_{10}N_2$  \*12) Nitril d. Hexahydropyridin-1-Carbonsäure. Sd. 122–124°<sub>90</sub> (*Am.* 29, 302 *C.* 1903 [1] 1165; *B.* 36, 1198 *C.* 1903 [1] 1215).  
 14) l-Amido-2,5-Dimethylpyrrol. Sm. 52–53°; Sd. 198–204° (*B.* 35, 4316 *C.* 1903 [1] 336).
- $C_6H_{10}Cl_2$  \*4) 1,2-Dichlorhexahydrobenzol. Sd. 196°<sub>760</sub> u. Zers. (*C. r.* 137, 242 *C.* 1903 [2] 665).  
 \*6) 1,4-Dichlorhexahydrobenzol. Sd. 189°<sub>761</sub> (*C. r.* 137, 241 *C.* 1903 [2] 665).
- $C_6H_{10}Br_2$  \*3) 1,2-Dibromhexahydrobenzol. Sd. 116°<sub>90</sub> (*Soc.* 85, 1414 *C.* 1904 [2] 1736).
- $C_6H_{10}S_2$  \*1) Diallyldisulfid. Sd. 77–82°<sub>18</sub> (*B.* 36, 2265 *C.* 1903 [2] 562).
- $C_6H_{11}N$  \*3) 1,5-Dimethyl-2,3-Dihydropyrrol (*G.* 33 [2] 317 *C.* 1904 [1] 292).
- $C_6H_{11}Cl$  \*7) Chlorhexahydrobenzol. Sd. 141,6–142,6° (*C. r.* 137, 241 *C.* 1903 [2] 664).
- $C_6H_{12}O$  \*3)  $\delta$ -Oxy- $\delta$ -Methyl- $\alpha$ -Penten (*C.* 1903 [2] 1415).  
 \*13) Oxyhexahydrobenzol. Sm. 155,5° (*Bl.* [3] 29, 1052 *C.* 1903 [2] 1437; *C. r.* 137, 1026 *C.* 1904 [1] 280; *C.* 1904 [1] 727; *C. r.* 137, 1269 *C.* 1904 [1] 454).  
 \*18) Hexan- $\alpha\epsilon$ -Oxyd. Sd. 102–104° (*M.* 23, 1090 *C.* 1903 [1] 384).  
 \*24)  $\gamma$ -Ketohehexan. Sd. 145–147° (*C.* 1903 [1] 1023; *B.* 36, 2715 *C.* 1903 [2] 987).  
 \*28) Pinakolin (*Bl.* [3] 29, 597 *C.* 1903 [2] 396).

- C<sub>6</sub>H<sub>12</sub>O** \*34) Aldehyd d. Isobutylessigsäure (*C. r.* 137, 989 *C. 1904* [1] 257).  
 43) Aldehyd d. Pentan- $\gamma$ -Carbonsäure. *Sd.* 117—118° (*C. r.* 138, 91 *C. 1904* [1] 505; *Bl.* [3] 31, 305 *C. 1904* [1] 1133).
- C<sub>6</sub>H<sub>12</sub>O<sub>2</sub>** \*1) 1,2-Dioxyhexahydrobenzol (*Bl.* [3] 29, 234 *C. 1903* [1] 970).  
 \*11)  $\beta$ -Oxy- $\delta$ -Keto- $\beta$ -Methylpentan (*M.* 24, 767 *C. 1904* [1] 158).  
 \*16) *i*- $\beta$ -Methylbutan- $\alpha$ -Carbonsäure. *Sd.* 197—198° (*D.R.P.* 150880 *C. 1904* [2] 70).  
 \*18)  $\beta$ -Methylbutan- $\beta$ -Carbonsäure. *Sd.* 186°<sub>752</sub> (*A.* 327, 210 *C. 1903* [1] 1407).  
 \*26) Methylester d. Isovaleriansäure (*B.* 37, 3659 *C. 1904* (2) 1452).  
 46) isom. 1,2-Dioxyhexahydrobenzol. *Sm.* 104°; *Sd.* 236°<sub>760</sub> (*C. r.* 136, 383 *C. 1903* [1] 711; *Bl.* [3] 29, 231 *C. 1903* [1] 970).  
 47) Äthyläther d.  $\alpha$ -Oxy- $\beta$ -Ketobutan. *Sd.* 145—146° (*C. r.* 138, 91 *C. 1904* [1] 505).  
 48) Säure (aus Naphta) (*C. 1903* [1] 1134).
- C<sub>8</sub>H<sub>16</sub>O<sub>3</sub>** \*11)  $\gamma$ -Oxyisocaprinsäure ( $\gamma$ -Oxy- $\beta$ -Methylbutan- $\delta$ -Carbonsäure). *Sd.* 173 bis 175°<sub>48</sub> (*M.* 24, 250 *C. 1903* [2] 238).  
 \*21)  $\beta$ -Oxy- $\alpha$ -Äthylbuttersäure. *Ca*, *Ba*, *Zn* + *H*<sub>2</sub>*O* (*A.* 334, 113 *C. 1904* [2] 888).  
 \*23)  $\beta$ -Oxy- $\alpha$ -Dimethylbuttersäure ( $\gamma$ -Oxy- $\beta$ -Methylbutan- $\beta$ -Carbonsäure). *Sd.* 150°<sub>92</sub> (*M.* 24, 248 *C. 1903* [2] 237).  
 \*25) Diäthylglykolsäure (*A.* 334, 101 *C. 1904* [2] 888).  
 \*33) Metaldehyd (*Ph. Ch.* 43, 132 *C. 1903* [1] 1078).  
 \*34) Paraldehyd (*Ph. Ch.* 43, 133 *C. 1903* [1] 1078).  
 \*44) Propylester d. *d*- $\alpha$ -Oxypropionsäure. *Sd.* 61—63°<sub>11-12</sub> (*C. 1903* [2] 1419).  
 \*57)  $\epsilon\zeta$ -Dioxy- $\beta$ -Ketohehexan. *Sd.* 170—175°<sub>13</sub> (*C. r.* 137, 14 *C. 1903* [2] 508).  
 61)  $\gamma$ -Oxy- $\beta$ -Äthylbuttersäure. *Ca* + 2*H*<sub>2</sub>*O*, *Ba* (*B.* 38, 1204 *C. 1903* [1] 1176).  
 62)  $\alpha$ -Oxy- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. *Sm.* 56°. *K* (*Bl.* [3] 31, 319 *C. 1904* [1] 1134).  
 63) Aldehyd d. Dioxyessigdiäthyläthersäure. *Sd.* 80—90° (*B.* 36, 1935 *C. 1903* [2] 189).  
 64) Methylester d.  $\alpha$ -Oxy- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. *Sd.* 177—178°<sub>740</sub> (*Bl.* [3] 31, 122 *C. 1904* [1] 644).  
 65) Äthylester d.  $\beta$ -Oxybuttersäure. *Sd.* 170° (*B.* 37, 1277 *C. 1904* [1] 1335).  
 66) Äthylester d.  $\gamma$ -Oxybuttersäure. *Sd.* 65—70°<sub>11</sub> (*B.* 37, 1277 *C. 1904* [1] 1335).  
 67) Propylester d. *l*- $\alpha$ -Oxypropionsäure. *Sd.* 60—61°<sub>10-11</sub> (*C. 1903* [2] 1419).  
 68) Monacetat d.  $\alpha$ - $\beta$ -Dioxy- $\beta$ -Methylpropan. *Sd.* 122—125° (125°<sub>780</sub>) (*C. r.* 137, 758 *C. 1903* [2] 1415; *Bl.* [3] 31, 17 *C. 1904* [1] 504).
- C<sub>6</sub>H<sub>12</sub>O<sub>4</sub>** \*10) Hexerinsäure. *Sm.* 144,5—145°. *Ca* + 2*H*<sub>2</sub>*O* (*A.* 334, 107 *C. 1904* [2] 888).  
 23)  $\alpha$ - $\gamma$ -Dioxy- $\beta$ - $\beta$ -Dimethylpropan- $\alpha$ -Carbonsäure. *Ca* + 3*H*<sub>2</sub>*O*, *Ag* + 8*H*<sub>2</sub>*O* (*M.* 25, 49 *C. 1904* [1] 717).
- C<sub>6</sub>H<sub>12</sub>O<sub>5</sub>** \*6) Fukose (*B.* 37, 299 *C. 1904* [1] 647; *B.* 37, 3859 *C. 1904* [2] 1712).  
 \*16) Rhodeose. *Sm.* 144° (*B.* 37, 3859 *C. 1904* [2] 1712).  
 17) *l*-Quercit + *H*<sub>2</sub>*O*. *Sm.* 174° (*Soc.* 85, 625 *C. 1904* [2] 329).  
 18) *r*-Rhodeose. *Sm.* 161° (*B.* 37, 3860 *C. 1904* [2] 1712).  
 19) Isorhodeose (*C. 1904* [1] 581).
- C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>** \*7) *d*-Galaktose (*B.* 36, 4373 *C. 1904* [1] 462).  
 \*14) *d*-Glykose (*C. 1903* [1] 1019; *A.* 331, 359 *C. 1904* [1] 1555).  
 \*28) *d*-Mannose (*C. 1904* [1] 191).  
 \*30) *i*-Mannose (*H.* 37, 545 *C. 1903* [1] 1217).  
 \*55) polym. Trioxymethylen + *H*<sub>2</sub>*O* (*C. r.* 138, 1227 *C. 1904* [2] 22).  
 \*59)  $\alpha$ -Glykose (*Soc.* 83, 1313 *C. 1904* [1] 86).  
 \*60)  $\beta$ -Glykose (*Soc.* 83, 1312 *C. 1904* [1] 86).  
 70) Cacao + *H*<sub>2</sub>*O*. *Sm.* 89—90° (*J. pr.* [2] 66, 408 *C. 1903* [1] 527).  
 51) Fukonsäure. *K* + 1½*H*<sub>2</sub>*O*, *Ca* + 5*H*<sub>2</sub>*O*, *Ba*, *Sr* (*B.* 37, 308 *C. 1904* [1] 649).
- C<sub>6</sub>H<sub>12</sub>N<sub>2</sub>** \*9) Nitril d. Diäthylamidoessigsäure. *Sd.* 170° (*B.* 36, 4189 *C. 1904* [1] 262; *C. 1904* [2] 1377; *B.* 37, 4089 *C. 1904* [2] 1724).

- $C_6H_{12}N_2$  10) Aethylenyl- $\alpha\delta$ -Tetrametylendiamin. *Sd.* 220°<sub>12</sub>. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 36, 338 *C.* 1903 [1] 703).
- $C_6H_{12}N_4$  \*1) Hexamethylentetramin. (HCl, AuCl<sub>3</sub>) (*C.* 1903 [1] 439; *A.* 334, 56 *C.* 1904 [2] 949).
- 2) *s*-Aethylcarbylaminäthylguanidin. *Sm.* 90—91° (*Bl.* [3] 31, 610 *C.* 1904 [2] 29).
- $C_6H_{12}Br_2$  \*2)  $\alpha\epsilon$ -Dibromhexan. *Sd.* 115—116°<sub>30</sub> (*M.* 23, 1089 *C.* 1903 [1] 384).
- \*9)  $\beta\gamma$ -Dibrom- $\beta\gamma$ -Dimethylbutan. *Sm.* 140° u. Zers. (*B.* 37, 547 *C.* 1904 [1] 866).
- $C_6H_{12}J_2$  \*1)  $\alpha\zeta$ -Dijodhexan. *Sm.* 9,5°; *Sd.* 163°<sub>17,5</sub> (*C. r.* 136, 244 *C.* 1903 [1] 583).
- $C_6H_{12}S_3$  \*1)  $\alpha$ -Trithioacetaldehyd. *Sm.* 101° (*C.* 1904 [2] 21).
- \*2)  $\beta$ -Trithioacetaldehyd. *Sm.* 125—126° (*C.* 1904 [2] 21).
- 5)  $\gamma$ -Trithioacetaldehyd. *Sm.* 76° (*C.* 1904 [2] 21).
- $C_6H_{13}N$  \*6) Amidohexahydrobenzol. *Sd.* 134° HCl (*C. r.* 138, 457 *C.* 1904 [1] 884).
- \*12) 1-Methylhexahydropyridin. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 37, 3234 *C.* 1904 [2] 1153).
- \*15) *r*-3-Methylhexahydropyridin. Bitartrat (*B.* 36, 1650 *C.* 1903 [2] 123).
- 21)  $\alpha$ -Propylimidopropan. *Sd.* 101—102° (*C.* 1904 [2] 945).
- 22) Isobutylimidoäthan. *Sd.* 90—91° (*C.* 1904 [2] 945).
- 23) *d*-3-Methylhexahydropyridin. Bitartrat (*B.* 36, 1650 *C.* 1903 [2] 123).
- 24) 1-3-Methylhexahydropyridin. Bitartrat (*B.* 36, 1650 *C.* 1903 [2] 123).
- $C_6H_{14}O$  \*1)  $\alpha$ -Oxyhexan. *Sd.* 156° (*C. r.* 138, 149 *C.* 1904 [1] 577).
- \*2)  $\beta$ -Oxyhexan. *Sd.* 127° (*C. r.* 137, 302 *C.* 1903 [2] 708).
- \*6)  $\gamma$ -Oxy- $\beta$ -Methylpentan. *Sd.* 112,5° (*C. r.* 137, 302 *C.* 1903 [2] 708).
- \*10)  $\gamma$ -Oxy- $\gamma$ -Methylpentan. *Sd.* 121—123°<sub>700</sub> (*C.* 1903 [2] 1415; *C. r.* 137, 758 *C.* 1903 [2] 1415; *Bl.* [3] 31, 17 *C.* 1904 [1] 504).
- \*12)  $\gamma$ -Oxy- $\beta\beta$ -Dimethylbutan (*C.* 1903 [2] 1415).
- \*19) Aethyläther d.  $\beta$ -Oxy- $\beta$ -Methylpropan. *Sd.* 67—68° (*C.* 1903 [1] 1119; 1904 [1] 1065).
- \*20) Dipropyläther. *Sd.* 89—91° (*G.* 33 [2] 420 *C.* 1904 [1] 922).
- \*21) Diisopropyläther. *Sd.* 70—70,5° (*C.* 1904 [2] 18).
- 23)  $\alpha$ -Oxy- $\beta\beta$ -Dimethylbutan. *Sd.* 135° (*Bl.* [3] 31, 749 *C.* 1904 [2] 303).
- $C_6H_{14}O_2$  \*1)  $\alpha\epsilon$ -Dioxyhexan (*M.* 23, 1091 *C.* 1903 [1] 384).
- \*2)  $\alpha\zeta$ -Dioxyhexan. *Sm.* 42° (35°); *Sd.* 254°<sub>787</sub> (*C. r.* 136, 245 *C.* 1903 [1] 583; *C. r.* 137, 329 *C.* 1903 [2] 711).
- \*9) Pinakon (*Bl.* [3] 29, 597 *C.* 1903 [2] 396).
- \*10) Diäthyläther d.  $\alpha\alpha$ -Dioxyäthan (*B.* 36, 188 *C.* 1904 [1] 638).
- 16)  $\alpha\delta$ -Dioxy- $\beta\beta$ -Dimethylbutan. *Sd.* 123°<sub>10</sub> (*C. r.* 137, 329 *C.* 1903 [2] 710).
- 17) Dimethyläther d.  $\alpha\delta$ -Dioxybutan. *Sd.* 132—133°<sub>760</sub> (*C. r.* 139, 977 *C.* 1904 [1] 1401).
- 18) Aethyläther d.  $\alpha\beta$ -Dioxy- $\beta$ -Methylpropan. *Sd.* 129° (*C. r.* 138, 91 *C.* 1904 [1] 504; *Bl.* [3] 31, 302 *C.* 1904 [1] 1133).
- $C_6H_{14}O_3$  \*12) Diäthyläther d. Di[Oxymethyl]äther. *Sd.* 140° (*C. r.* 138, 1704 *C.* 1904 [2] 416).
- $C_6H_{14}O_6$  \*3) Di[ $\beta\gamma$ -Dioxypropyl]äther. *Sd.* 261—262°<sub>27</sub> (*A.* 335, 239 *C.* 1904 [2] 1204).
- $C_6H_{14}O_8$  \*2) *d*-Idit (*C.* 1904 [2] 1291).
- \*4) Mannit (*B.* 37, 299 *C.* 1904 [1] 647).
- \*11) *d*-Sorbit (*C.* 1904 [2] 1291).
- $C_6H_{14}N_2$  \*3) 1,4-Diamidohexahydrobenzol. *H<sub>3</sub>PO<sub>4</sub>* (*A.* 328, 107 *C.* 1903 [2] 244).
- \*5) 1,4-Dimethylhexahydro-1,4-Diazin. *Sd.* 131—132°<sub>752</sub>. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 37, 3516 *C.* 1904 [2] 1324).
- 20)  $\epsilon\zeta$ -Diamido- $\alpha$ -Hexen. *Sd.* 185—190°. 2HCl, (2HCl, PtCl<sub>4</sub>), Oxalat (*C.* 1904 [2] 1024).
- 21) 1-Amido-3-Methylhexahydropyridin. *Sd.* 160—165° (*C.* 1903 [1] 1034).
- 22) 1-Amido-4-Methylhexahydropyridin. *Sd.* 160—165° (*C.* 1903 [1] 1034).
- 23) Verbindung (aus  $\alpha\delta$ -Diamidobutan u. Formaldehyd). *Sd.* 180—181°<sub>20</sub> (*B.* 36, 37 *C.* 1903 [1] 502).
- $C_6H_{16}N$  \*10) Dipropylamin. (2HCl, PtCl<sub>4</sub>) (*C.* 1904 [1] 923).
- \*13) Triäthylamin. (HCl + 6HgCl<sub>2</sub>) (*J. pr.* [2] 66, 471 *C.* 1903 [1] 561).
- 18)  $\alpha$ -Isopropylamidopropan (Propylisopropylamin). (2HCl, PtCl<sub>4</sub>) (*C.* 1904 [1] 923).
- $C_6H_{16}N_3$  \*2) 1,3,5-Trisubstituiertes Hexahydro-1,3,5-Triazin. *Sd.* 160—164°. HJ (D.R.P. 139394 *C.* 1903 [1] 1111; *A.* 334, 226 *C.* 1904 [2] 899).

- $C_6H_{15}N_3$  4) isom. 1,3,5-Trimethylhexahydro-1,3,5-Triazin. HJ, (HJ +  $CHJ_3$ ), Pikrat (A. 334, 228 C. 1904 [2] 900).
- $C_6H_{16}N_2$  \*7)  $\alpha\beta$ -Di[Dimethylamid]äthan. Sd. 120—122°<sub>745</sub>. 2HCl, Pikrat (B. 37, 3495 C. 1904 [2] 1319; B. 37, 3499 C. 1904 [2] 1321; B. 37, 3510 C. 1904 [2] 1322).
- $C_6H_{16}Sn$  \*1) Zinndimethyldiäthyl. Fl. (C. 1904 [1] 353).  
2) Zintrimethylpropyl. Sd. 129°<sub>764</sub> (C. 1904 [1] 353).
- $C_6OCl_6$  \*1) Hexachlor-1-Keto-1,2-Dihydrobenzol. Sm. 106° (108—110°) (B. 37, 4008 C. 1904 [2] 1715; B. 37, 4021 C. 1904 [2] 1717).
- $C_6OCl_5$  \*1) Oktochlor-1-Keto-1,2,3,4-Tetrahydrobenzol. Sm. 106—108° (B. 37, 4021 C. 1904 [2] 1717).
- $C_6O_2Cl_4$  \*2) 2,3,5,6-Tetrachlor-1,4-Benzochinon. Sm. 239° (292°) (C. 1903 [2] 550; B. 36, 4390 C. 1904 [1] 444; B. 37, 2623 C. 1904 [2] 484).
- $C_6O_2Br_4$  \*1) 3,4,5,6-Tetrabrom-1,2-Benzochinon. + Toluol, + Acetophenon (Am. 31, 90 C. 1904 [1] 802).

## — 6 III —

- $C_6HOCl_5$  \*1) Pentachloroxybenzol. Sm. 190—191°.  $NH_4$ , Na, Ag (B. 37, 4017 C. 1904 [2] 1716).
- $C_6HOCl_7$  \*1) 2,2,3,4,4,5,6-Heptachlor-1-Keto-1,2,3,4-Tetrahydrobenzol. Sd. 95° (B. 37, 4006 C. 1904 [2] 1715).
- $C_6HO_2Cl_3$  \*1) 2,3,5-Trichlor-1,4-Benzochinon. Sm. 169—170° (B. 37, 4016 C. 1904 [2] 1716).
- $C_6H_2OCl_4$  \*1) 2,3,4,6-Tetrachlor-1-Oxybenzol. Sm. 69—70°; Sd. 150°<sub>18</sub>. Na (B. 37, 4010 C. 1904 [2] 1715).  
4) 2,3,4,5-Tetrachlor-1-Oxybenzol. Sm. 67,5°; Sd. 190°<sub>40</sub> (Bl. [3] 27, 1174 C. 1903 [1] 232).
- $C_6H_2O_2Cl_4$  \*3) 2,3,5,6-Tetrachlor-1,4-Dioxybenzol. Sm. 236° (J. pr. [2] 70, 33 C. 1904 [2] 1234).
- $C_6H_2O_2Br_2$  \*1) 2,5-Dibrom-1,4-Benzochinon. Sm. 188° (C. 1903 [2] 550).
- $C_6H_2N_4S_2$  1) Benzbithiodiazol (p-Phenylendisiazosulfid). Sm. 224—226° u. Zers. (Soc. 83, 1205 C. 1903 [2] 1328).
- $C_6H_2ClBr_3$  \*1) 1-Chlor-2,4,6-Tribrombenzol. Sm. 80—81° (90—91°) (C. r. 136, 242 C. 1903 [1] 570; Am. 31, 374 C. 1904 [1] 1408).
- $C_6H_2ClJ_3$  2) 2,4,6-Trijod-1-Chlorbenzol. Sm. 125—126° (B. 36, 2071 C. 1903 [2] 358).
- $C_6H_2ON_7$  C 33,1 — H 1,6 — O 8,4 — N 51,8 — M. G. 189.  
1) Azid d. 1,2,9-Benzisotetrazol-5-Carbonsäure. Sm. 103—104° (B. 36, 1116 C. 1903 [1] 1185).
- $C_6H_3OJ_3$  3) 2,4,5-Trijod-1-Oxybenzol. Sm. 114° (C. r. 137, 1066 C. 1904 [1] 266).
- $C_6H_3O_2Cl_3$  \*3) 2,3,5-Trichlor-1,4-Dioxybenzol. Sm. 138° (B. 37, 4017 C. 1904 [2] 1716).
- $C_6H_3O_4Cl$  3) 3-Chlor-1,2-Pyron-5-Carbonsäure. Sm. 187—189° (B. 37, 3830 C. 1904 [2] 1614).
- $C_6H_3O_7N_3$  \*3) Pikrinsäure. Rb (C. 1903 [1] 810; 1903 [2] 565; Ph. Ch. 46, 827 C. 1904 [1] 508).
- $C_6H_3O_8N_3$  \*1) 2,4,6-Trinitro-1,3-Dioxybenzol. Sm. 175° (M. 25, 27 C. 1904 [1] 723).  
4) isom. Trinitrodioxybenzol. Sm. 163° (M. 25, 574 C. 1904 [2] 907).
- $C_6H_3O_9N_3$  \*1) 2,4,6-Trinitro-1,3,5-Trioxybenzol +  $H_2O$ . Sm. 160—161° (Am. 32, 173 C. 1904 [2] 950).
- $C_6H_3NBr_4$  \*2) 2,3,4,6-Tetrabrom-1-Amidobenazol. Sm. 115° (A. 330, 58 C. 1904 [1] 1142).
- $C_6H_4OCl_2$  \*1) 2,4-Dichlor-1-Oxybenzol. Sm. 43° (B. 37, 4030 C. 1904 [2] 1718).  
5) 3,4-Dichlor-1-Oxybenzol. Sm. 64—65°; Sd. 145—146° (D. R. P. 156333 C. 1904 [2] 1673).
- $C_6H_4OBr_2$  \*1) 2,4-Dibrom-1-Oxybenzol. Sm. 34—35° (Soc. 85, 1227 C. 1904 [2] 204, 1032).  
\*2) 2,6-Dibrom-1-Oxybenzol. Sm. 57—59° (A. 334, 177 C. 1904 [2] 834).
- $C_6H_4OJ_2$  \*1) 2,4-Dijod-1-Oxybenzol. Sm. 72° (C. r. 139, 65 C. 1904 [2] 590).  
6) 3,4-Dijod-1-Oxybenzol. Sm. 83° (C. r. 136, 1078 C. 1903 [1] 1339).  
7) 3,5-Dijod-1-Oxybenzol. Sm. 103—104° (C. r. 136, 237 C. 1903 [1] 574).

- $C_6H_4OJ_2$  8) 3-Jod-1-Jodosobenzol. Zers. bei  $124^\circ$ .  $HNO_3$ ,  $H_2SO_4$ ,  $H_2CrO_4$  (B. 37, 1302 C. 1904 [1] 1339).
- $C_6H_4O_2N_4$  9) 1,2,3,9-Benzisotetrazol-5-Carbonsäure. Ag (B. 36, 1115 C. 1903 [1] 1184).
- $C_6H_4O_2Cl_2$  \*4) 2,5-Dichlor-1,4-Dioxybenzol. Sm.  $170^\circ$  (C. 1903 [2] 550).
- $C_6H_4O_2J_2$  3) 1,3-Dijodosobenzol (B. 37, 1304 C. 1904 [1] 1340).
- $C_6H_4O_2N_2$  4) 3-Jod-1-Jodobenzol. Zers. bei  $216-218^\circ$  (B. 37, 1305 C. 1904 [1] 1340).
- 2) 2-Nitro-1-Nitrosobenzol. Sm.  $126-126,5^\circ$  (B. 36, 3804 C. 1904 [1] 17; B. 36, 4176 C. 1904 [1] 264).
- 3) 3-Nitro-1-Nitrosobenzol. Sm.  $85^\circ$  ( $89-90,5^\circ$ ) (B. 36, 2530 C. 1903 [2] 491; B. 36, 3806 C. 1904 [1] 17).
- 4) 4-Nitro-1-Nitrosobenzol. Sm.  $118,5-119^\circ$  (B. 36, 3809 C. 1904 [1] 17; B. 36, 4177 C. 1904 [1] 264).
- $C_6H_4O_3N_4$  \*2) Verbindung (aus Acetylen). Sm.  $78^\circ$  (G. 33 [2] 322 C. 1904 [1] 255).
- $C_6H_4O_3Br_2$  4) 4,6-Dibrom-1,2,3-Trioxybenzol? Sm.  $158^\circ$  u. Zers. (B. 37, 113 C. 1904 [1] 585).
- $C_6H_4O_4N_2$  \*1) 1,2-Dinitrobenzol. Sm.  $118-118,5^\circ$  (B. 36, 3805 C. 1904 [1] 17; B. 36, 4176 C. 1904 [1] 264).
- \*2) 1,3-Dinitrobenzol. Sm.  $71^\circ$ . +  $AlCl_3$  (C. 1903 [2] 194; Soc. 85, 1108 C. 1904 [2] 976).
- \*3) 1,4-Dinitrobenzol. Sm.  $173,5-174^\circ$  (B. 36, 3829 C. 1904 [1] 19).
- \*4) 2,4-Dinitroso-1,3-Dioxybenzol +  $\frac{1}{2}H_2O$ . Zers. bei  $164-166^\circ$  (B. 36, 736 C. 1903 [1] 840; B. 37, 1794 C. 1904 [1] 1612).
- \*6) 1,2-Diazin-4,5-Dicarbonsäure. Sm.  $212-213,5^\circ$ .  $Ag_2$  (B. 36, 3376 C. 1903 [2] 1192).
- 10) 1,3-Diazin-4,5-Dicarbonsäure +  $H_2O$ . Sm.  $265^\circ$  u. Zers. ( $NH_4$ ), Cu +  $\frac{1}{2}H_2O$ ,  $Ag_2$  (B. 37, 3648 C. 1904 [2] 1513).
- $C_6H_4O_4J_2$  2) 1,3-Dijodobenzol. Zers. bei  $261^\circ$  (B. 37, 1306 C. 1904 [1] 1340).
- $C_6H_4O_5N_2$  \*1) 2,3-Dinitro-1-Oxybenzol (R. 21, 446 C. 1903 [1] 510).
- \*2) 2,4-Dinitro-1-Oxybenzol (R. 21, 446 C. 1903 [1] 510).
- \*3) 2,5-Dinitro-1-Oxybenzol (R. 21, 446 C. 1903 [1] 510).
- \*4) 2,6-Dinitro-1-Oxybenzol (R. 21, 446 C. 1903 [1] 510).
- \*5) 3,4-Dinitro-1-Oxybenzol (R. 21, 446 C. 1903 [1] 510).
- \*6) 3,5-Dinitro-1-Oxybenzol (R. 21, 446 C. 1903 [1] 510).
- $C_6H_4O_5S$  1) 1,4-Benzochinon-2-Sulfonsäure.  $NH_4$ , K (J. pr. [2] 69, 341 C. 1904 [2] 37).
- $C_6H_4O_6N_2$  \*6) Pyrazol-3,4,5-Tricarbonsäure +  $2H_2O$ . Sm.  $230^\circ$  (A. 325, 184 C. 1903 [1] 646).
- $C_6H_4O_6N_4$  4) Verbindung (aus Acetylen). Sd.  $112^\circ_{40}$  (G. 33 [2] 322 C. 1904 [1] 256).
- $C_6H_4O_7N_2$  C 33,3 — H 1,8 — O 51,8 — N 13,0 — M. G. 216.
- 1) 4,6-Dinitro-1,2,3-Trioxybenzol. Sm.  $208^\circ$  (B. 37, 120 C. 1904 [1] 586).
- $C_6H_4NCl_3$  \*1) 2,3,4-Trichlor-1-Amidobenzol. Sm.  $65-68^\circ$  (A. 330, 56 C. 1904 [1] 1142).
- 6) 2,3,5-Trichlor-4-Methylpyridin. Sm.  $31-31,5^\circ$  (Soc. 83, 399 C. 1903 [1] 841, 1141).
- $C_6H_4NJ_2$  \*1) 2,4,6-Trijod-1-Amidobenzol. Sm.  $185^\circ$  (B. 36, 2070 C. 1903 [2] 358).
- 3) 2,4,5-Trijod-1-Amidobenzol. Sm.  $116^\circ$  (C. r. 137, 1066 C. 1904 [1] 266).
- $C_6H_4N_2Cl_2$  \*1) 1,4-Di[Chlorimido]-1,4-Dihydrobenzol. Sm.  $126^\circ$  u. Zers. (B. 37, 1498 C. 1904 [1] 1414).
- $C_6H_4N_2Br_2$  \*3) 2,6-Dibrom-1,4-Diimido-1,4-Dihydrobenzol. HCl, HBr (Am. 31, 210 C. 1904 [1] 1073).
- $C_6H_4N_2S_4$  1) 3,6-Diamido-1,2,4,5-Tetrathiocarbonyl-1,2,4,5-Tetrahydrobenzol (Soc. 83, 1211 C. 1903 [2] 1329).
- $C_6H_4N_3Cl$  3) 4-Chlor-1,2,3-Benzotriazol. Sm.  $156^\circ$  (B. 36, 4028 C. 1904 [1] 294).
- $C_6H_4N_3Br$  1) 4-Nitrobenzoldiazoniumazid (B. 36, 2057 C. 1903 [2] 356).
- $C_6H_4N_3Fe$  \*1) Ferrocyanwasserstoffsäure (C. r. 137, 65 C. 1903 [2] 348).
- $C_6H_4Cl_2J_2$  2) 3-Jod-1-Dichlorjodosobenzol (3-Jodphenyljodidchlorid). Zers. bei  $112^\circ$  (B. 37, 1301 C. 1904 [1] 1339).
- $C_6H_4Cl_4J_2$  2) 1,3-Di[Dichlorjodoso]benzol (1,3-Phenylendijodidtetraclorid). Zers. bei  $122^\circ$  (B. 37, 1301, 1305 C. 1904 [1] 1339).
- $C_6H_5OCl$  \*1) 2-Chlor-1-Oxybenzol (D. R. P. 141751 C. 1903 [1] 1324; D. R. P. 155631 C. 1904 [2] 1486).
- $C_6H_5OBr$  \*3) 4-Brom-1-Oxybenzol. +  $H_3PO_4$  (Sm.  $65-75^\circ$ ) (R. 21, 354 C. 1903 [1] 151).

- $C_6H_5OJ$  \*3) 3-Jod-1-Oxybenzol (*A.* 332, 66 *C.* 1904 [2] 42).  
 \*5) Jodosobenzol (*B.* 36, 2996 *C.* 1903 [2] 932).
- $C_6H_5O_2N$  \*1) Nitrobenzol (*B.* 36, 971 *C.* 1903 [1] 1066; *B.* 36, 1110 *C.* 1903 [1] 1333).  
 \*3) Pyridin-2-Carbonsäure (*M.* 24, 199 *C.* 1903 [2] 48).  
 \*4) Pyridin-3-Carbonsäure (*M.* 24, 200 *C.* 1903 [2] 48).  
 \*5) Pyridin-4-Carbonsäure (*M.* 24, 200 *C.* 1903 [2] 48).
- $C_6H_5O_3N$  \*1) 2-Nitro-1-Oxybenzol.  $Na, K + \frac{1}{2}H_2O, Rb + \frac{1}{2}H_2O$  (*Am.* 30, 312 *C.* 1903 [2] 1116).  
 \*2) 3-Nitro-1-Oxybenzol.  $Na, K + H_2O, Rb, Cs$  (*Am.* 30, 317 *C.* 1903 [2] 1116; *J. pr.* [2] 68, 480 *C.* 1904 [1] 443).  
 \*3) 4-Nitro-1-Oxybenzol.  $Na + 4H_2O, K + H_2O, Rb + H_2O, Cs + 3H_2O$  (*Am.* 30, 318 *C.* 1903 [2] 1116; *J. pr.* [2] 68, 484 *C.* 1904 [1] 444).  
 \*4) 4-Nitroso-1,3-Dioxybenzol (*B.* 35, 4192 *C.* 1903 [1] 145).
- $C_6H_5O_3Br$  \*4) 4-Brom-1,2,3-Trioxybenzol. Zers. oberh.  $120^\circ$  (*B.* 37, 112 *C.* 1904 [1] 584).  
 \*5) 2-Brommethylfuran-5-Carbonsäure. Sm.  $147-148^\circ$  (*Am.* 15, 180). — \*III, 507.
- $C_6H_5O_4N$  \*1) 3-Nitro-1,2-Dioxybenzol. Sm.  $85,5^\circ$  (*J. pr.* [2] 68, 477 *C.* 1904 [1] 443; *J. pr.* [2] 68, 481 *C.* 1904 [1] 444).  
 \*2) 4-Nitro-1,2-Dioxybenzol. Sm.  $175,5-176,5^\circ$  (*J. pr.* [2] 68, 477 *C.* 1904 [1] 443; *J. pr.* [2] 68, 482 *C.* 1904 [1] 444).  
 \*3) 2-Nitro-1,3-Dioxybenzol. Sm.  $85^\circ$  (*D.R.P.* 145190 *C.* 1903 [2] 973; *B.* 37, 725 *C.* 1904 [1] 1005).
- $C_6H_5O_4N_3$  \*3) 4-Nitro-1-Nitramidobenzol. Sm.  $110^\circ$  (*A.* 330, 36 *C.* 1904 [1] 1141).  
 $C_6H_5O_5N$  \*7) 4-Nitro-1,2,3-Trioxybenzol. Sm.  $162^\circ$  ( $NH_4$ ),  $K_2$ , + 2 Chinolin (*B.* 37, 114 *C.* 1904 [1] 585).  
 \*8) Methylester d. P-Nitrofuran-2-Carbonsäure. Sm.  $78,5^\circ$  (*C. r.* 137, 520 *C.* 1903 [2] 1069).
- $C_6H_5O_5N_3$  \*1) 4,6-Dinitro-2-Amido-1-Oxybenzol (*C.* 1904 [2] 1385).  
 $C_6H_5O_6N_5$  \*1) 2,4,6-Trinitro-1,3-Diamidobenzol (*R.* 21, 324 *C.* 1903 [1] 79).  
 \*3)  $\beta$ -Nitroisocallitursäure. Sm.  $170-195^\circ$  u. Zers. (*A.* 333, 122 *C.* 1904 [2] 894).
- $C_6H_5O_9N_2$  \*1) Verbindung (aus d. Verb.  $C_{12}H_{18}O_{10}N_{12}$ ) =  $(C_6H_5O_9N_2)_x$ . Ag (*M.* 25, 118 *C.* 1904 [1] 1553).
- $C_6H_5NCl_2$  \*2) 2,4-Dichlor-1-Amidobenzol. Sm.  $61-62^\circ$  (*C.* 1903 [2] 549).  
 $C_6H_5NBr_2$  \*1) 2,4-Dibrom-1-Amidobenzol. Sm.  $80^\circ$  (*C.* 1903 [2] 549).  
 \*3) 2,6-Dibrom-1-Amidobenzol. Sm.  $82-83^\circ$  (*A.* 329, 217 *C.* 1903 [2] 1427).
- $C_6H_5NJ_2$  \*1) 2,4-Dijod-1-Amidobenzol. Sm.  $95-96^\circ$  (*C.* 1903 [2] 550; *C. r.* 139, 64 *C.* 1904 [2] 590).  
 \*3) 3,5-Dijod-1-Amidobenzol. Sm.  $107^\circ$  (*C. r.* 136, 237 *C.* 1903 [1] 574).  
 \*4) 2,6-Dijod-1-Amidobenzol. Sm.  $122^\circ$  (*C. r.* 138, 1505 *C.* 1904 [2] 319).  
 \*5) 3,4-Dijod-1-Amidobenzol. Sm.  $74,5^\circ$  (*C. r.* 136, 1078 *C.* 1903 [1] 1339).
- $C_6H_5N_2Br_3$  \*4) 3,4,5-Tribrom-1,2-Diamidobenzol. Sm.  $91^\circ$ .  $HCl$  (*Am.* 30, 78 *C.* 1903 [2] 856).
- $C_6H_5N_2F$  \*1) Diazobenzolfluorid.  $HF$  (*B.* 36, 2059 *C.* 1903 [2] 357).  
 $C_6H_5ClS$  \*1) 4-Chlor-1-Merkaptobenzol. Sm.  $54^\circ$  (*C. r.* 138, 982 *C.* 1904 [1] 1413).  
 \*3) 2-Chlor-1-Merkaptobenzol. Sd.  $205-206^\circ$  (*C.* 1904 [2] 1176).
- $C_6H_5Cl_2J$  \*1) Jodbenzoldichlorid (*C. r.* 136, 242 *C.* 1903 [1] 570).  
 $C_6H_5Cl_3Si$  \*1) Siliciumphenyltrichlorid (*B.* 37, 1139 *C.* 1904 [1] 1257).  
 $C_6H_5BrS$  \*1) 4-Brom-1-Merkaptobenzol. Sm.  $70-71^\circ$  (*C. r.* 138, 982 *C.* 1904 [1] 1413).
- $C_6H_5ON_2$  \*1) 4-Nitroso-1-Amidobenzol. Sm.  $175^\circ$  (*B.* 36, 3830 *C.* 1904 [1] 19).  
 $C_6H_5OS$  \*1) 2-Merkapto-1-Oxybenzol (*C.* 1904 [2] 1176).  
 $C_6H_5O_2N_2$  \*4) 4-Nitro-1-Amidobenzol. Sm.  $147^\circ$  (*B.* 36, 3829 *C.* 1904 [1] 19; *D.R.P.* 148749 *C.* 1904 [1] 554).  
 \*5) Oxynitrosoamidobenzol. Sm.  $59^\circ$ .  $Ba + H_2O$  (*A.* 329, 192 *C.* 1903 [2] 1414; *G.* 33 [2] 242 *C.* 1904 [1] 24).  
 \*9) 1,4-Dioximido-1,4-Dihydrobenzol. Zers. bei  $230-240^\circ$  (*B.* 36, 4137 *C.* 1904 [1] 185).
- \*16) 3-Amidopyridin-4-Carbonsäure (*M.* 23, 944 *C.* 1903 [1] 296).  
 \*21) 4-Amidopyridin-3-Carbonsäure (*M.* 23, 945 *C.* 1903 [1] 296).

- $C_6H_5O_2N_2$  24) 4-Nitroso-3-Amido-1-Oxybenzol. Sm. 200° u. Zers. (B. 37, 2278 C. 1904 [2] 434).
- $C_6H_5O_2N_4$  \*6) Heteroxanthin (C. 1904 [2] 1421).
- $C_6H_5O_2S$  \*1) Benzolsulfonsäure. Sm. 84°. Na + H<sub>2</sub>O, Mg<sub>2</sub> + 6H<sub>2</sub>O, Ag (B. 35, 4114 C. 1903 [1] 82; B. 37, 2153 C. 1904 [2] 186).
- $C_6H_5O_3N_2$  19) Imid d.  $\alpha$ -Imido- $\gamma$ -Ketobutan- $\alpha\beta$ -Dicarbonsäure (A. 332, 135 C. 1904 [2] 190).
- $C_6H_5O_3S$  \*1) Benzolsulfonsäure. NH<sub>4</sub> + HF, Methylaminsalz, Aethylaminsalz, Diäthylaminsalz, Anilinsalz (A. 328, 145 C. 1903 [2] 992; B. 37, 3804 C. 1904 [2] 1564).
- $C_6H_5O_4N_2$  \*9) 2-Methylimidazol-4,5-Dicarbonsäure (B. 37, 701 C. 1904 [1] 1562).
- \*12) 4-Methylpyrazol-3,5-Dicarbonsäure + H<sub>2</sub>O. Sm. 313° (315° u. Zers.) (B. 36, 1131 C. 1903 [1] 1139; A. 325, 182 C. 1903 [1] 646).
- 13) 4,5-Diacetyl-1,2,3,6-Dioxdiazin (Diacetylglyoximhyperoxyd). Fl. (C. 1903 [2] 1432).
- 14) Verbindung (aus 1,4-Dinitrobenzol). K<sub>2</sub> (B. 36, 4177 C. 1904 [1] 264).
- $C_6H_5O_4N_4$  11) Isocallitursäure. Sm. 258—260° u. Zers. Ag<sub>2</sub> (A. 333, 118 C. 1904 [2] 893).
- $C_6H_5O_5S$  \*3) 4-Oxybenzol-1-Sulfonsäure. (NH<sub>4</sub> + HF) (A. 328, 146 C. 1903 [2] 992).
- $C_6H_5O_5S_2$  \*1) Benzol-1,3-Disulfinsäure. Fl. K<sub>2</sub>, Zn + 3H<sub>2</sub>O (B. 36, 189 C. 1903 [1] 467; J. pr. [2] 68, 315 C. 1903 [2] 1170).
- 2) Benzol-1,4-Disulfinsäure. K<sub>2</sub>, Ba (J. pr. [2] 68, 330 C. 1903 [2] 1171).
- $C_6H_5O_5S_4$  \*1) Benzol-1,3-Di[Thiolsulfonsäure]. K<sub>2</sub> (J. pr. [2] 68, 329 C. 1903 [2] 1171).
- $C_6H_5O_6S$  10) 1,2-Dioxybenzol-P-Sulfonsäure (D.R.P. 137119 C. 1903 [1] 112).
- $C_6H_5O_6N_2$  \*3) Dimethylester d. 1,2,3,6-Dioxdiazin-4,5-Dicarbonsäure. Sd. 151°<sub>10</sub> (Bl. [3] 27, 1165 C. 1903 [1] 228).
- 4) Monoäthylester d. 1,2,3,6-Dioxdiazin-4,5-Dicarbonsäure. Sm. 103,5°. NH<sub>4</sub> (Bl. [3] 27, 1168 C. 1903 [1] 228).
- $C_6H_5O_6S$  \*1) 1,2,3-Trioxymethylbenzol-P-Sulfonsäure. Sr + 2H<sub>2</sub>O (C. r. 136, 760 C. 1903 [1] 1024).
- \*4) 2-Methylfuran-5-Carbonsäure-4-Sulfonsäure. K<sub>2</sub> + 2H<sub>2</sub>O (Am. 32, 189 C. 1904 [2] 1138).
- $C_6H_5O_6Hg_2$  1) Verbindung (aus Essigsäureanhydrid u. Mercuriacetat) (B. 36, 3707 C. 1903 [2] 1240).
- $C_6H_5O_6S_2$  \*2) 1,2,3-Trioxymethylbenzol-P-Disulfonsäure. Sr + 3H<sub>2</sub>O, Ba<sub>3</sub> (C. r. 136, 760 C. 1903 [1] 1024).
- $C_6H_5NCl$  \*3) 4-Chlor-1-Amidobenzol (Am. 29, 302 C. 1903 [1] 1165; C. r. 138, 1174 C. 1904 [2] 96).
- $C_6H_5NJ$  \*1) 2-Jod-1-Amidobenzol. Sm. 57° (M. 25, 956 C. 1904 [2] 1638).
- $C_6H_5N_2Br_2$  \*3) 2,6-Dibrom-1,4-Diamidobenzol (Am. 31, 209 C. 1904 [1] 1073).
- 9) 2,5-Dibrom-1,4-Diamidobenzol. Sm. 183—184°. 2HCl (Am. 28, 458 C. 1903 [1] 322).
- $C_6H_5N_2S_2$  \*1) 2,5-Diamido-1,4-Dithiocarbonyl-1,4-Dihydrobenzol. Sm. 234—235° u. Zers. HCl, 2HCl (Soc. 83, 1208 C. 1903 [2] 1328).
- $C_6H_7ON$  \*1) 2-Amido-1-Oxybenzol (J. pr. [2] 68, 473 C. 1904 [1] 442).
- \*2) 3-Amido-1-Oxybenzol (J. pr. [2] 68, 474 C. 1904 [1] 443).
- \*3) 4-Amido-1-Oxybenzol (J. pr. [2] 68, 479 C. 1904 [1] 443; D.R.P. 150800 C. 1904 [1] 1235).
- \*11) 2-Keto-1-Methyl-1,2-Dihydropyridin (B. 36, 1062 C. 1903 [1] 1267).
- \*15) 2-Methylimidomethylfuran. Sd. 67°<sub>10</sub>. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>) (A. 335, 371 C. 1904 [2] 1405).
- $C_6H_7ON_3$  \*7) 4-Nitroso-1,3-Diamidobenzol (B. 37, 2276 C. 1904 [2] 433).
- $C_6H_7OCl$  2) 5-Chlor-1-Keto-1,2,3,4-Tetrahydrobenzol. Sd. 104°<sub>24</sub> (Soc. 83, 499 C. 1903 [1] 1028, 1352).
- $C_6H_7OBr$  1) 5-Brom-1-Keto-1,2,3,4-Tetrahydrobenzol. Sd. 132,5—133°<sub>52</sub> (Soc. 83, 500 C. 1903 [1] 1028, 1352).
- $C_6H_7O_2N$  \*2) 4-Amido-1,3-Dioxybenzol (B. 35, 4195 C. 1903 [1] 145).
- \*16) Nitril d.  $\beta\delta$ -Diketopentan- $\gamma$ -Carbonsäure. Sm. 50° (B. 37, 3386 C. 1904 [2] 1220).
- 30) P-Acetylamidofuran. Sm. 112° (C. r. 136, 1455 C. 1903 [2] 292).
- 31) 3-Acetyl-5-MethylisoxazolP. Sm. 22°; Sd. 177° (G. 34 [1] 49 C. 1904 [1] 1150).

- $C_6H_7O_2N$  32) 5-Oxy-4-Keto-2-Methyl-1,4-Dihydropyridin +  $H_2O$ . Sm.  $80^\circ$  (170 bis  $171^\circ$  wasserfrei).  $HCl$  +  $2H_2O$  (*C. r.* 138, 507 *C.* 1904 [1] 897).
- $C_6H_7O_2N_3$  \*2) 4-Nitro-1,3-Diamidobenzol. Sm.  $157^\circ$  (*B.* 37, 2277 *C.* 1904 [2] 433).  
 \*8) 4-Nitrophenylhydrazin (*C.* 1903 [2] 1471).  
 12) 4-Acetylamido-2-Keto-1,2-Dihydro-1,3-Diazin. Sm. noch nicht bei  $300^\circ$  (*Am.* 29, 500 *C.* 1903 [1] 1311).  
 13) 2-Acetylamido-4-Keto-3,4-Dihydro-1,3-Diazin. Sm.  $247^\circ$  (*Am.* 29, 504 *C.* 1903 [1] 1311).  
 14) 6-Hydrazidopyridin-3-Carbonsäure. Sm.  $283^\circ$ .  $H_2SO_4$  (*B.* 36, 1113 *C.* 1903 [1] 1184).
- $C_6H_7O_3N$  19) 4-Amido-1,2,3-Trioxybenzol.  $HCl$  (*B.* 37, 118 *C.* 1904 [1] 586).
- $C_6H_7O_3Br$  \*1) Aethylester d.  $\alpha\alpha\gamma$ -Tribrom- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure (*C.* 1904 [1] 1067).
- $C_6H_7O_4N_3$  \*6) Dimethylviolursäure (*Soe.* 83, 18 *C.* 1903 [1] 448).  
 9) 5-Acetylamido-2,4,6-Triketohexahydro-1,3-Diazin.  $NH_4$ , K, Ag (*A.* 333, 85 *C.* 1904 [2] 827).
- $C_6H_7O_4Br$  6)  $\alpha\gamma$ -Lakton d.  $\beta$ -Brom- $\gamma$ -Oxybutan- $\alpha\beta$ -Dicarbonsäure. Sm.  $138^\circ$  u. Zers. (*A.* 331, 140 *C.* 1904 [1] 933).
- $C_6H_7O_5N_3$  2) 2,4,6-Triketohexahydro-1,3-Diazin-5-Amidoessigsäure (Uramiloessigsäure) (*A.* 333, 70 *C.* 1904 [2] 772).
- $C_6H_7O_6N$  \*2)  $\alpha$ -Aethylester d.  $\alpha$ -Nitroäthen- $\alpha\beta$ -Dicarbonsäure ( $\alpha$ -Ae. d. Nitromaleinsäure). K, Anilinsalz (*Am.* 32, 232 *C.* 1904 [2] 1141).
- $C_6H_7O_{11}N_3$  6) Trinitrat d. Salepschleim (*B.* 36, 3201 *C.* 1903 [2] 1054).
- $C_6H_7NS$  \*3) Methyläther d. 2-Merkaptopyridin. Sd.  $197^\circ$  (*A.* 331, 251 *C.* 1904 [1] 1222).  
 \*4) 2-Thiocarbonyl-1-Methyl-1,2-Dihydropyridin. Sm.  $89^\circ$  (*A.* 331, 248 *C.* 1904 [1] 1222).
- $C_6H_7NSe$  1) 2-Selencarbonyl-1-Methyl-1,2-Dihydropyridin. Sm.  $79-80^\circ$  (*A.* 331, 251 *C.* 1904 [1] 1222).  
 2) Methyläther d. 2-Selenopyridin. Sd.  $212^\circ$  (*A.* 331, 253 *C.* 1904 [1] 1223).
- $C_6H_7N_2Cl$  \*1) 4-Chlor-1,2-Diamidobenzol. Sm.  $72^\circ$  ( $76^\circ$ ).  $H_2SO_4$  (*B.* 36, 4027 *C.* 1904 [1] 294; *B.* 37, 555 *C.* 1904 [1] 893).
- $C_6H_8ON_2$  \*4) 3,4-Diamido-1-Oxybenzol.  $2HCl$ , ( $2HCl$ ,  $SnCl_2$ ) (*B.* 37, 2278 *C.* 1904 [2] 434).  
 \*12) 2-Keto-4,6-Dimethyl-2,5-Dihydro-1,3-Diazin. Sm.  $198-199^\circ$  (*Am.* 32, 357 *C.* 1904 [2] 1415).  
 18) 3-Oximido-2,4-Dimethylisopyrrol. Na (*G.* 34 [1] 43 *C.* 1904 [1] 1150).  
 19) 3-Oximido-2,5-Dimethylisopyrrol. Na (*G.* 34 [1] 44 *C.* 1904 [1] 1150).  
 20) 3- oder 5-Acetyl-4-Methylpyrazol. Sm.  $102-103^\circ$ ; Sd.  $160-161^\circ_{26}$  (*B.* 36, 1131 *C.* 1903 [1] 1139).
- $C_6H_8O_2N_2$  \*18) 2,4-Diketo-3,6-Dimethyl-1,2,3,4-Tetrahydro-1,3-Diazin. Sm. 261 bis  $262^\circ$  (*A.* 329, 349 *C.* 1904 [1] 435).  
 \*20) 2,4-Diketo-5,6-Dimethyl-1,2,3,4-Tetrahydro-1,3-Diazin. Sm.  $292^\circ$  u. Zers. (*Am.* 29, 489 *C.* 1903 [1] 1309).  
 22) 2-Methyläther d. 2,6-Dioxy-4-Methyl-1,3-Diazin. Sm.  $207^\circ$ . ( $2HCl$ ,  $PtCl_2$ ), Ag (*C.* 1904 [2] 30).  
 23) Dimethyläther d. 2,4-Dioxy-1,3-Diazin. Sm.  $10^\circ$ ; Sd.  $204,5-205^\circ_{760}$ . ( $HCl$ ,  $AuCl_3$ ), 2 +  $3HgCl_2$  (*B.* 36, 3379 *C.* 1903 [2] 1192).  
 24) Dilaktam d.  $\beta\gamma$ -Diamidobutan- $\alpha\delta$ -Dicarbonsäure +  $H_2O$ .  $HCl$  +  $H_2O$  (*B.* 35, 4125 *C.* 1903 [1] 136; *B.* 36, 172 *C.* 1903 [1] 445).  
 25) Cyanamid d.  $\alpha$ -Acetylpropionsäure? Zers. bei  $260^\circ$  (*Am.* 29, 489 *C.* 1903 [1] 1309).  
 26) Methyl ester d.  $\alpha$ -Cyan- $\beta$ -Amidopropen- $\alpha$ -Carbonsäure. Sm.  $181,5^\circ$  (*Bl.* [3] 31, 334 *C.* 1904 [1] 1135).  
 27) Verbindung (aus  $\beta\gamma\epsilon$ -Trioximidohexan). Sm.  $117^\circ$  (*G.* 34 [1] 47 *C.* 1904 [1] 1150).
- $C_6H_8O_2N_4$  2) 1-Aethylidenamido-5-Methyl-1,2,3-Triazol-4-Carbonsäure. Sm.  $153^\circ$  u. Zers. (*B.* 36, 3617 *C.* 1903 [2] 1381).
- $C_6H_8O_2Cl_2$  5)  $\gamma\gamma$ -Dichlor- $\beta\epsilon$ -Diketohehexan. Sd.  $124-126^\circ_{26}$  (*A.* 335, 261 *C.* 1904 [2] 1283).

- $C_6H_5O_2Cl_2$  1)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Oxyäthyläther d.  $\alpha\alpha\alpha$ -Trichlor- $\beta$ -Oxy- $\beta$ -Methylpropan (Chloralacetonechloroform). Sm. 65° (D.R.P. 151188 C. 1904 [1] 1506).
- $C_6H_5O_2N_2$  \*5) 2,4,6-Triketo-5-Aethylhexahydro-1,3-Diazin. Sm. 194° (D.R.P. 146948 C. 1904 [1] 68; A. 335, 357 C. 1904 [2] 1382).
- \*7) 2,4,6-Triketo-5,5-Dimethylhexahydro-1,3-Diazin. Sm. 279°, Na<sub>2</sub> (D.R.P. 146496 C. 1903 [2] 1484; D.R.P. 146949 C. 1904 [1] 68; A. 335, 341, 364 C. 1904 [2] 1381).
- 21) 4,6-Diamido-1,2,3-Trioxylbenzol. 2 HCl (B. 37, 121 C. 1904 [1] 586).
- 22) 2,4-Diketo-1-Acetyl-3-Methyltetrahydroimidazol. Sm. 134—135° (A. 333, 131 C. 1904 [2] 895).
- 23) 2,4-Diketo-1-Acetyl-5-Methyltetrahydroimidazol. Sm. 129—131° (A. 327, 383 C. 1903 [2] 661).
- 24) 5-Oxy-2,4-Diketo-3,6-Dimethyl-1,2,3,4-Tetrahydro-1,3-Diazin (Oxy- $\beta$ -Dimethyluracil) (A. 327, 264 C. 1903 [2] 349).
- 25) Oxyhistincarbonsäure + H<sub>2</sub>O (Oxydesamidohistidin). Sm. 204° (M. 24, 237 C. 1903 [2] 55).
- 26) Aethylester d. 5-Methyl-1,2,3-Oxdiazol-4-Carbonsäure (Anhydrid d. Diazoacetessigsäureäthylester). Sd. 102—104°<sub>12</sub> (A. 325, 134 C. 1903 [1] 643).
- $C_6H_5O_2Br_2$  \*2) Aethylester d.  $\alpha\alpha$ -Dibrom- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sd. 120—125°<sub>12</sub> (B. 36, 1731 C. 1903 [2] 37; C. 1904 [1] 1067).
- $C_6H_5O_4N_2$  7) Verbindung (aus d. Verb. C<sub>6</sub>H<sub>5</sub>O<sub>4</sub>N<sub>2</sub>). Sm. 90° (B. 36, 4252 C. 1904 [1] 358; B. 36, 4366 C. 1904 [1] 358; B. 37, 48 C. 1904 [1] 506).
- $C_6H_5O_4Br_2$  \*4)  $\alpha\delta$ -Dibrombutan- $\alpha\delta$ -Dicarbonsäure. Sm. 191° (B. 37, 2090 C. 1904 [2] 23).
- 13)  $\beta\gamma$ -Dibrombutan- $\alpha\beta$ -Dicarbonsäure. Sm. 174° u. Zers. (A. 331, 136 C. 1904 [1] 932).
- 14)  $\gamma\delta$ -Dibrombutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 149—150° (B. 36, 1203 C. 1903 [1] 1175).
- 15) isom.  $\alpha\delta$ -Dibrombutan- $\alpha\delta$ -Dicarbonsäure. Sm. 138—139° (B. 37, 2091 C. 1904 [2] 23).
- $C_6H_5O_7Se_2$  1) Verbindung (aus Mannit). Zers. bei 190° (C. r. 136, 376 C. 1903 [1] 625).
- $C_6H_5O_{10}N_2$  C 26,9 — H 3,0 — O 59,7 — N 10,4 — M. G. 268.
- 1) Dimethylester d. Dinitroweinsäure. Sm. 75° (See. 83, 162 C. 1903 [1] 627).
- 2) Dimethylester d. Dinitrotraubensäure. Sm. 104° (B. 35, 4366 C. 1903 [1] 321).
- $C_6H_5N_2S_2$  2) 2,5-Diamido-1,4-Dimerkaptobenzol. Sm. 178—181° u. Zers. 2 HCl, ZnOH (See. 83, 1209 C. 1903 [2] 1328).
- $C_6H_5ON$  13) Anhydrid d. P-Amidohexensäure. Sm. 109° (B. 37, 2360 C. 1904 [2] 423).
- $C_6H_5ON_3$  9) Methylanhydrodiacetylguanidin. Sm. 238—255°. HCl + 3 H<sub>2</sub>O, (2 HCl, PtCl<sub>4</sub> + 3 H<sub>2</sub>O) (Ar. 241, 462 C. 1903 [2] 988).
- 10) Amid d. 3,4-Dimethylpyrazol-1-Carbonsäure. Sm. 164—165° u. Zers. (A. 329, 133 C. 1903 [2] 1323).
- $C_6H_5ON_5$  2) Hydrazid d. 6-Hydrazidopyridin-3-Carbonsäure + H<sub>2</sub>O. Sm. 217—218°. 2 HCl, Pikrat (B. 36, 1112 C. 1903 [1] 1184).
- $C_6H_5O_3N$  \*8) Aethylester d.  $\alpha$ -Cyanpropionsäure. Sd. 198° (C. 1903 [2] 713).
- 28) Furfurol + Methylamin. (2 HCl, PtCl<sub>4</sub>) (A. 335, 374 C. 1904 [2] 1406).
- 29) Nitril d. Butyroxylelessigsäure. Sd. 200°<sub>753</sub> (C. 1904 [2] 1377).
- $C_6H_5O_2N_3$  \*7) Hystidin. Sm. 253°. HCl + H<sub>2</sub>O, (HCl, CdCl<sub>2</sub>) Pikrolonat (M. 24, 229 C. 1903 [2] 55; H. 37, 220, 248 C. 1903 [1] 566; H. 39, 212 C. 1903 [2] 581; H. 39, 213 C. 1903 [2] 581; H. 42, 508 C. 1904 [2] 1289; H. 43, 73 C. 1904 [2] 1610).
- 11) Aethyläther d. 1-Nitroso-5-Oxy-3-Methylpyrazol. Sm. 40° (B. 37, 2835 C. 1904 [2] 643).
- 12) Aethyläther d. 4-Nitroso-5-Oxy-3-Methylpyrazol. Sm. 126—127° u. Zers. (B. 37, 2835 C. 1904 [2] 643).
- 13) 5-Methylamido-2,4-Diketo-6-Methyl-1,2,3,4-Tetrahydro-1,3-Diazin + H<sub>2</sub>O. Sm. 214°. HCl (Am. 32, 355 C. 1904 [2] 1415).
- 14) 5-Dimethylamido-2,4-Diketo-1,2,3,4-Tetrahydro-1,3-Diazin. Sm. 297° u. Zers. (Am. 32, 355 C. 1904 [2] 1415).

- $C_6H_5O_2N_3$  15) Aethyläther d. 6-Jmido-2-Oxy-4-Keto-3,4,5,6-Tetrahydro-1,3-Diazin. Sm. 247° (D.R.P. 155732 C. 1904 [2] 1631).
- 16) Aethylester d. 5-Methyl-1,2,3-Triazol-4-Carbonsäure. Sm. 161 bis 162° (A. 325, 153 C. 1903 [1] 644).
- $C_6H_5O_2Cl$  \*1) 2-Chlor-3-Keto-1-Oxyhexahydrobenzol. Sm. 130—135° u. Zers. (Soc. 83, 499 C. 1903 [1] 1352).
- $C_6H_5O_2Br$  6) 2-Brom-3-Keto-1-Oxyhexahydrobenzol? Sm. 143—145° u. Zers. (Soc. 83, 500 C. 1903 [1] 1352).
- 7) Aethylester d.  $\alpha$ -Brompropen- $\alpha$ -Carbonsäure. (Ae. d.  $\alpha$ -Bromcroton-säure). Sd. 95—97°<sub>15</sub> (B. 36, 1085 C. 1903 [1] 1126).
- $C_6H_5O_2N_3$  \*4) 5-Amido-2,4,6-Triketo-1,3-Dimethylhexahydro-1,3-Diazin (A. 333, 74 C. 1904 [2] 826).
- 12) 5-Amido-2,4,6-Triketo-5-Aethylhexahydro-1,3-Diazin. Sm. 216° u. Zers. (A. 335, 361 C. 1904 [2] 1382).
- 13) 5-Aethylamido-2,4,6-Triketohexahydro-1,3-Diazin (Aethyluramil). A. 333, 65 C. 1904 [2] 772).
- 14) Aethylester d. 1-Oxy-5-Methyl-1,2,3-Triazol-4-Carbonsäure. Sm. 147—148° (A. 325, 163 C. 1903 [1] 645).
- $C_6H_5O_2Cl$  6) Aethylester d.  $\gamma$ -Chlor- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sd. 105°<sub>11</sub>. Cu (C. r. 138, 421 C. 1904 [1] 789).
- $C_6H_5O_2Br$  \*3) Aethylester d.  $\alpha$ -Brom- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sd. 101 bis 104°<sub>12</sub> (B. 36, 1730 C. 1903 [2] 37; C. 1904 [1] 1067).
- $C_6H_5O_2J$  \*1) Aethylester d.  $\alpha$ -Jod- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Fl. (B. 36, 1731 C. 1903 [2] 37).
- $C_6H_5O_2N$  \*4) Aethylester d. anti- $\alpha$ -Oximido- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure (B. 37, 47 C. 1904 [1] 506).
- 11) Methylester d.  $\alpha$ -Acetoximidopropionsäure. Sm. 42°; Sd. 136°<sub>14</sub> (Bl. [3] 31, 1070 C. 1904 [2] 1457).
- 12) Aethylester d.  $\gamma$ -Oximido- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm. 50° (B. 36, 4252 C. 1904 [1] 357).
- $C_6H_5O_2N_3$  5) Aethylester d.  $\alpha$ -Oximido- $\beta$ -Nitrosimidobuttersäure.  $NH_4, K + H_2O, K_2, Ba, Zn$  (C. 1903 [2] 1111; B. 36, 4250 C. 1904 [1] 357; B. 36, 4366 C. 1904 [1] 358; B. 37, 48 C. 1904 [1] 506).
- $C_6H_5O_2Br$  \*6)  $\alpha$ -Brom- $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 140° (Soc. 83, 1383 C. 1904 [1] 158, 434).
- \*12)  $\gamma$ - oder  $\delta$ -Brombutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 110—111° (B. 36, 1203 C. 1903 [1] 1175).
- 13)  $\beta$ -Brombutan- $\alpha\delta$ -Dicarbonsäure. Sm. 147° u. Zers. (A. 326, 82 C. 1903 [1] 842).
- $C_6H_5O_2N$  4)  $\alpha$ -Nitro- $\beta$ -Acetoxylbuttersäure (C. 1903 [2] 554).
- $C_6H_5O_2B$  1) Gem. Anhydrid d. Essigsäure u. Borsäure. Sm. 121° (B. 36, 2219 C. 1903 [2] 420).
- $C_6H_5O_2N$  C 34,8 — H 4,3 — O 54,1 — N 6,7 — M. G. 207.
- 1) Nitrat d. 1- $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäuredimethylester. Sm. 24 bis 25° (B. 35, 4363 C. 1903 [1] 320).
- $C_6H_5O_2N$  C 32,3 — H 4,0 — O 57,4 — N 6,3 — M. G. 223.
- 1) Dimethylester d. Mononitroweinsäure. Sm. 97° (Soc. 83, 162 C. 1903 [1] 627; B. 35, 4366 C. 1903 [1] 321; B. 36, 780 C. 1903 [1] 826).
- $C_6H_5O_{10}N_6$  \*1) Mannitpentanitrat (B. 36, 797 C. 1903 [1] 956).
- 2) Dulcitantnitrat. Sm. 75° (B. 36, 799 C. 1903 [1] 956).
- $C_6H_5N_3S$  8) Aethyläther d. 4-Amido-2-Merkapto-1,3-Diazin. Sm. 85—86° (Am. 29, 497 C. 1903 [1] 1311).
- $C_6H_{10}ON_2$  \*4) Amid d.  $\alpha$ -Cyanvaleriansäure. Sm. 124—124,5° (C. 1903 [2] 192).
- \*10) 5-Keto-3-Propyl-4,5-Dihydropyrazol. Sm. 198° (Bl. [3] 27, 1091 C. 1903 [1] 226).
- \*11) 5-Keto-3-Methyl-4-Aethyl-4,5-Dihydropyrazol. Sm. 195—196° (Bl. [3] 31, 593 C. 1904 [2] 26; Bl. [3] 31, 761 C. 1904 [2] 343).
- 12) Aethyläther d. 5-Oxy-3-Methylpyrazol. Sm. 66—67° (B. 37, 2834 C. 1904 [2] 643).
- 13) 2,5-Diäthyl-1,3,4-Oxdiazol. Sd. 198°<sub>780</sub> (J. pr. [2] 69, 481 C. 1904 [2] 537).
- 14) Nitril d.  $\alpha$ -Acetylamidoisobuttersäure. Sm. 106° (B. 37, 1921 C. 1904 [2] 196).

- $C_6H_{10}O_2N_2$  21) Aethylester d.  $\alpha$ -Diazobuttersäure. Sd. 63–65°<sub>11</sub> (B. 37, 1274 C. 1904 [1] 1334).
- $C_6H_{10}O_2N_4$  12) Bisdiazaoacetone. Sm. 228° u. Zers. (G. 34 [1] 202 C. 1904 [1] 1485).
- $C_6H_{10}O_2Br_2$  \*6)  $\beta\gamma$ -Dibrompentan- $\gamma$ -Carbonsäure. Sm. 83,5° (A. 334, 109 C. 1904 [2] 888).
- 15) isom.  $\beta\gamma$ -Dibrompentan- $\gamma$ -Carbonsäure. Sm. 116,5° (A. 334, 109 C. 1904 [2] 888).
- $C_6H_{10}O_2S_2$  3) Disulfid d. Thiolpropionsäure. Fl. (B. 36, 1010 C. 1903 [1] 1077).
- $C_6H_{10}O_2N_2$  \*12) Triacetylhydrazin. Fl. (J. pr. [2] 69, 147 C. 1904 [1] 1274).
- $C_6H_{10}O_2N_4$  1) Acetat d.  $\alpha$ -Oximido- $\beta$ -Semicarbazonpropan. Sm. 186° (C. 1903 [2] 1432).
- $C_6H_{10}O_4N_2$  \*5) Diäthylester d. Azocarbonsäure. Sd. 111–112°<sub>15</sub> (P. GUTMANN, Dissert., Heidelberg 1903).
- 9) Acetylamidoacetylamidoessigsäure. Sm. 187–189° (B. 36, 2115 C. 1903 [2] 346).
- 10) Aethylamid d. N-Acetoximidooxyessigsäure. Sm. 138° (Soc. 81, 1572 C. 1903 [1] 158).
- $C_6H_{10}O_4N_6$  C 31,3 — H 4,3 — O 27,8 — N 36,5 — M. G. 230.
- 1) Amid d. 1,3-Dinitrosohexahydro-1,3-Diazin-4,6-Dicarbonsäure. Sm. 192–193° (G. 33 [1] 384 C. 1903 [2] 579).
- $C_6H_{10}O_4Se$  1)  $\alpha$ -Selenilaktylsäure. Sm. 145–146°. Ba, Ag<sub>2</sub> (B. 35, 4109 C. 1903 [1] 134).
- 2)  $\beta$ -Selenilaktylsäure. Sm. 106–107°. Ba, Ag<sub>2</sub> (B. 35, 4110 C. 1903 [1] 135).
- $C_6H_{10}O_5Hg_4$  1) Oxyd (aus d. Verb.  $C_{14}H_{22}O_{11}Hg_4$ ) (B. 36, 3703 C. 1903 [2] 1239).
- $C_6H_{10}O_6S$  4) Di[ $\alpha$ -Oxyäthyl]sulfid- $\alpha\alpha'$ -Dicarbonsäure ( $\alpha$ -Merkaptoäthylmilchsäure). Sm. 94° u. Zers. (87° u. Zers.) (A. 188, 325; R. 21, 297 C. 1903 [1] 16). — I, 897.
- $C_6H_{10}N_2S$  3) 4-Thiocarbonyl-2,5,5-Trimethyl-4,5-Dihydroimidazol? Sm. 163° HCl (B. 37, 1924 C. 1904 [2] 196).
- 4) 2,5-Diäthyl-1,3,4-Thiodiazol. Sd. 105°<sub>14</sub> (J. pr. [2] 69, 482 C. 1904 [2] 537).
- $C_6H_{10}N_2S_2$  2) Aethylenäther d.  $\alpha\delta$ -Diimido- $\alpha\delta$ -Dimerkaptobutan. HCl (B. 36, 3467 C. 1903 [2] 1244).
- $C_6H_{10}ClI$  1) 2-Jod-1-Chlorhexahydrobenzol. Sd. 117–118°<sub>14</sub> (C. r. 135, 1057 C. 1903 [1] 233).
- $C_6H_{11}ON$  \*26) 2-Oximido-1-Methyl-R-Pentamethylen (A. 331, 325 C. 1904 [1] 1567).
- 32) d-3-Oximido-1-Methyl-R-Pentamethylen. Sm. 91–92,5° (A. 332, 349 C. 1904 [2] 653).
- 33) isom. d-3-Oximido-1-Methyl-R-Pentamethylen. Sm. 60–68° (A. 332, 349 C. 1904 [2] 653).
- $C_6H_{11}OCl_3$  1)  $\beta$ -Trichlordipropyläther. Sd. 199–205° (G. 33 [2] 426 C. 1904 [1] 922).
- $C_6H_{11}OJ$  4) 2-Jod-1-Oxyhexahydrobenzol. Sm. 41,5–42° (C. r. 135, 1055 C. 1903 [1] 233).
- $C_6H_{11}O_2N$  \*4)  $\beta$ -Nitroso- $\delta$ -Keto- $\beta$ -Methylpentan. Sm. 75,5°; Sd. 157–158°<sub>785</sub> (B. 36, 695 C. 1903 [1] 817; B. 36, 1069 C. 1903 [1] 1121).
- \*16) Hygrinsäure + H<sub>2</sub>O (1-Methyltetrahydropyrrol-2-Carbonsäure). Sm. 169–170°. HCl, (HCl, AuCl<sub>3</sub>), Cu (A. 326, 122 C. 1903 [1] 843).
- \*19) Aethylester d.  $\beta$ -Amidocrotonsäure. Sm. 33° (20°) (B. 36, 388 C. 1903 [1] 567; C. 1904 [1] 1067).
- 30)  $\beta$ -Nitroso- $\gamma$ -Ketohehexan. Sd. 120–125°<sub>80</sub> (B. 36, 2715 C. 1903 [2] 987).
- 31) Acetylamid d. Isobuttersäure. Sm. 177–178° (C. r. 137, 714 C. 1903 [2] 1428).
- $C_6H_{11}O_2N_6$  \*3) Diamid d. Tetrahydropyrrol-2,2-Dicarbonsäure. Sm. 162–162,5°. Pikrat (A. 326, 101 C. 1903 [1] 842).
- 4) Monosemicarbazone d.  $\beta\gamma$ -Diketopentan. Sm. 209° (B. 36, 3185 C. 1903 [2] 939).
- $C_6H_{11}O_2Br$  17)  $\alpha$ -Bromisocaproonsäure. Sd. 128–131°<sub>12</sub> (B. 36, 2988 Anm. C. 1903 [2] 1112).
- $C_6H_{11}O_3N$  \*4) Aethylester d.  $\alpha$ -Amido- $\alpha$ -Acetylessigsäure. Acetat (G. 34 [1] 193 C. 1904 [1] 1333).

- $C_8H_{11}O_8N$  22)  $\beta$ -Nitro- $\delta$ -Keto- $\beta$ -Methylpentan. Krystalle; Sd. 118—119°<sub>17</sub> (B. 36, 658 C. 1903 [1] 762).
- 23)  $\alpha$ -Acetylamidoisobuttersäure. K (B. 37, 1922 C. 1904 [2] 196).
- 24)  $\delta$ -Oximido- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 153—154° u. Zers. Ag (Bl. [3] 31, 1073 C. 1904 [2] 1457).
- 25) Isobutylester d. Oximidoessigsäure. Sd. 117—118°<sub>10</sub> (Bl. [3] 31, 678 C. 1904 [2] 195).
- 26) Monamid d. Propan- $\beta\beta$ -Dicarbonsäuremonomethylester. Sm. 85 bis 86° (Soc. 83, 1241 C. 1903 [2] 1421).
- 27) sec. Butylmonamid d. Oxalsäure. Sm. 88—89° (Ar. 242, 55 C. 1904 [1] 997).
- $C_8H_{11}O_8N_8$  7)  $\beta\gamma\delta$ -Trioximidohexan. Sm. 159° (G. 34 [1] 45 C. 1904 [1] 1150).
- 8) Acetat d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 149—150° (145°) (C. r. 138, 1275 C. 1904 [2] 93; A. 335, 262, 269 C. 1904 [2] 1284).
- 9) Acetat d.  $\alpha$ -Semicarbazon- $\beta$ -Oxypropan. Sm. 163° (A. 335, 267 C. 1904 [2] 1284).
- 10) Acetylhydrazid d. Acetylamidoessigsäure. Sm. 183,5° (J. pr. [2] 70, 105 C. 1904 [2] 1036).
- $C_8H_{11}O_4N$  \*14) Diäthylester d. Imidodicarbonsäure. Sm. 49—50°; Sd. 132—133°<sub>12</sub> (B. 36, 743 C. 1903 [1] 827).
- 18)  $\alpha$ -Amidobutan- $\alpha\beta$ -Dicarbonsäure + H<sub>2</sub>O. Sm. 110—112° (132° wasserfrei). Ag (B. 35, 4373 C. 1903 [1] 281).
- 19)  $\alpha$ -Amidobutan- $\alpha\delta$ -Dicarbonsäure + H<sub>2</sub>O. Sm. 204—206° (wasserfrei) (C. 1903 [2] 34).
- 20) Äthylester d.  $\alpha$ -Nitrobuttersäure. Sd. 123°<sub>30</sub>. Na (C. 1904 [2] 1600).
- 21) Isobutylester d. Nitroessigsäure. Sd. 102°<sub>8</sub>. K (Bl. [3] 31, 853 C. 1904 [2] 641).
- 22)  $\beta$ -Amid d.  $\alpha$ -Oxybutan- $\alpha\beta$ -Dicarbonsäure. Sm. 158—159° (B. 35, 4372 C. 1903 [1] 281).
- $C_8H_{11}O_4N_3$  3) Amidoacetylamidooacetylamidoessigsäure (Diglycylglycin). Sm. 246° u. Zers. (B. 36, 2983 C. 1903 [2] 1111; B. 37, 2500 C. 1904 [2] 426).
- 4) Äthylester d. 1,2-Dioxytetrahydro-1,2,3-Triazol-4-Methylencarbonsäure. Sm. 70—71°. Ba + 8H<sub>2</sub>O, Ag (B. 36, 4254 C. 1904 [1] 358). C 30,9 — H 4,7 — O 34,4 — N 30,0 — M. G. 233.
- $C_8H_{11}O_8N_5$  1)  $\beta$ -Semicarbazon- $\gamma\gamma$ -Dinitropentan. Sm. 143—144° u. Zers. (G. 34 [1] 412 C. 1904 [2] 304).
- 2)  $\gamma$ -Semicarbazon- $\beta\beta$ -Dinitropentan. Sm. 147—148° u. Zers. (G. 34 [1] 412 C. 1904 [2] 304).
- $C_8H_{11}O_8N_3$  \*1)  $\beta$ -Trinitro- $\beta$ -Methylpentan. Sm. 85° (C. 1903 [2] 194).
- $C_8H_{11}O_8N_6$  1) Verbindung (aus d. Verb. C<sub>12</sub>H<sub>18</sub>O<sub>10</sub>N<sub>12</sub>). = (C<sub>8</sub>H<sub>11</sub>O<sub>8</sub>N<sub>6</sub>)<sub>x</sub> (M. 25, 120 C. 1904 [1] 1553).
- $C_8H_{11}O_8P$  1) Säure (aus Mannit) (C. r. 137, 518 C. 1903 [2] 1053).
- $C_8H_{11}O_7P$  1) Dulcidphosphorsäure +  $\frac{1}{2}$ H<sub>2</sub>O (C. r. 139, 638 C. 1904 [2] 1536).
- 2) Säure (aus Mannit). Ba (C. r. 136, 307 C. 1903 [1] 625). C 32,0 — H 4,9 — O 56,9 — N 6,2 — M. G. 225.
- $C_8H_{11}O_8N$  1) Nitrat d. Cellulose (B. 37, 549 C. 1904 [1] 872).
- $C_8H_{11}NBr_2$  1)  $\beta$ -Dibrom-1,5-Dimethyl-2,3-Dihydropyrrol. HBr (G. 33 [2] 318 C. 1904 [1] 292).
- $C_8H_{11}NF_4$  1)  $\beta\beta\beta\beta$ -Tetrafluortriäthylamin. Sd. 137°<sub>74</sub> (C. 1904 [2] 1377).
- $C_8H_{11}NS$  6) Allylamid d. Thiopropionsäure. Sd. 136°<sub>12</sub> (B. 37, 877 C. 1904 [1] 1004).
- $C_8H_{11}N_2J$  \*3) Jodmethylat d. 1,2-Dimethylimidazol. Sm. noch nicht bei 300° (Soc. 83, 470 C. 1903 [1] 931, 1143).
- 5) Jodmethylat d. 1,3-Dimethylpyrazol. Sm. 256° (Soc. 83, 468 C. 1903 [1] 931, 1143).
- 6) Jodmethylat d. 1,4-[oder 1,5-]Dimethylimidazol. Sm. 156° (Soc. 83, 466 C. 1903 [1] 931, 1143).
- $C_8H_{12}ON_2$  \*4) Amid d. Hexahydropyridin-1-Carbonsäure. Sm. 93° (Bl. [3] 31 C. 1904 [1] 521).
- $C_8H_{12}OCl_2$  \*2) Propyläther d.  $\alpha\beta$ -Dichlor- $\alpha$ -Oxypropan. Sd. 165—170° (G. 33 [2] 424 C. 1904 [1] 922).
- $C_8H_{12}O_2N_2$  30)  $\alpha\alpha$ -Di[Formylamid]- $\beta$ -Methylpropan. Sm. 172° (M. 25, 936 C. 1904 [2] 1598).
- 31) Methyläthylacetylharnstoff. Sm. 178,5° (A. 335, 367 C. 1904 [2] 1382).

- $C_6H_{12}O_3N_2$  32) Ursäure d. Methyläthyllessigsäure. Sm. 178,5° (D.R.P. 144431 *C.* 1903 [2] 813).
- $C_6H_{12}O_2N_4$  5)  $\beta$ -Oximido- $\gamma$ -Semicarbazonpentan. Sm. 219° u. Zers. (*G.* 34 [1] 410 *C.* 1904 [2] 304).
- 6)  $\gamma$ -Oximido- $\beta$ -Semicarbazonpentan. Sm. 222° u. Zers. (*G.* 34 [1] 411 *C.* 1904 [2] 304).
- $C_6H_{12}O_2N_6$  2) cyclisches Semicarbazon (aus Oxymethylenacetone u. Semicarbazid). Zers. bei 232° (*A.* 329, 131 *C.* 1903 [2] 1323).
- $C_6H_{12}O_2Cl_2$  \*2) Diäthyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dioxyäthan. Sd. 181—184° (*G.* 33 [2] 405 *C.* 1904 [1] 922).
- $C_6H_{12}O_3N_2$  8) Äthylester d.  $\alpha$ -Ureidopropionsäure. Sm. 100° (93—94°) (*Am.* 28, 393 *C.* 1903 [1] 90; *A.* 327, 382 *C.* 1903 [2] 661).
- $C_6H_{12}O_3S$  2) S-Methylhydroxyd d. Tetrahydrothiophen-2-Carbonsäure. Sm. 105°. Salze siehe (*B.* 31, 2290, 2294; 33, 839). — \*III, 593.
- $C_6H_{12}O_4N_2$  \*2)  $\beta\gamma$ -Dinitro- $\beta\gamma$ -Dimethylbutan. Sm. 213—214° (*B.* 36, 1776 *C.* 1903 [2] 102).
- 18)  $\beta\gamma$ -Diamidobutan- $\alpha\beta$ -Dicarbonsäure + 2H<sub>2</sub>O. Zers. bei 265—280°. 2HCl (*B.* 35, 4124 *C.* 1903 [1] 136; *B.* 36, 173 *C.* 1903 [1] 445).
- 19)  $\beta$ -Diamidobutan- $\alpha\delta$ -Dicarbonsäure. Sm. 278° (*B.* 37, 1596 *C.* 1904 [1] 1449; *H.* 42, 283 *C.* 1904 [2] 958).
- 20) Dinitrit d.  $\beta\gamma$ -Dioxy- $\beta\gamma$ -Dimethylbutan. Sm. 160° u. Zers. (*B.* 36, 1775 *C.* 1903 [2] 102).
- 21) Methylamid d. d-Weinsäure. Sm. 189° (*Soc.* 83, 1360 *C.* 1904 [1] 84).
- 22) Di[ $\beta$ -Oxyäthylamid] d. Oxalsäure. Sm. 167—168° (*B.* 36, 1279 *C.* 1903 [1] 1215).
- $C_6H_{12}O_4S$  6) Allylacetonydsulfonsäure. Ba + H<sub>2</sub>O (*B.* 37, 4048 *C.* 1904 [2] 1648).
- 7) 2-Oxyhexahydrobenzol-1-Sulfonsäure. Na + H<sub>2</sub>O (*C. r.* 137, 63 *C.* 1903 [2] 570).
- $C_6H_{12}O_6Hg_3$  1) Verbindung (aus Propylen) (*B.* 36, 3705 *C.* 1903 [2] 1239).
- $C_6H_{12}O_6B_2$  1) Triäthylendiborat. Sm. 100; Sd. 271—272° (*B.* 36, 2221 *C.* 1903 [2] 420).
- $C_6H_{12}NJ$  2) Jodmethylat d. 5-Methyl-2,3-Dihydropyrrol. Sm. 260° u. Zers. (*G.* 33 [2] 316 *C.* 1904 [1] 292).
- $C_6H_{12}N_2S_3$  1) Sulfid d. Dimethylamidodithioameisensäure. Sm. 104° (*B.* 36, 2280 *C.* 1903 [2] 560).
- $C_6H_{12}N_2S_4$  \*3) Dimethyläther d. Di[Methylimidomerkaptomethyl]disulfid (*B.* 36, 2266 *C.* 1903 [2] 562).
- $C_6H_{12}ON$  \*10) 1-Methylhexahydropyridin-N-Oxyd. (2HCl, PtCl<sub>4</sub>), HJ, Pikrat (*B.* 37, 3233 *C.* 1904 [2] 1152).
- \*22)  $\alpha$ -Oximido- $\beta$ -Methylpentan. Sd. 103°<sub>85</sub> (*Bl.* [3] 29, 646 *C.* 1903 [2] 553).
- 26) 2-Amido-1-Oxyhexahydrobenzol. Sm. 66°; Sd. 219°. HCl, HNO<sub>3</sub> (*C. r.* 137, 199 *C.* 1903 [2] 665).
- 27)  $\gamma$ -Oximidomethylpentan. Sd. 95°<sub>34</sub> (*Bl.* [3] 31, 306 *C.* 1904 [1] 1133).
- 28) Isoamylamid d. Ameisensäure. Sd. 123,5—124° (*B.* 36, 2475 *C.* 1903 [2] 559).
- $C_6H_{12}ON_3$  \*3)  $\beta$ -Semicarbazonpentan. Sm. 112° (*Bl.* [3] 27, 1083 *C.* 1903 [1] 225).
- $C_6H_{12}OCl$  7)  $\alpha$ -Chlor- $\beta$ -Oxy- $\beta$ -Methylpentan. Sd. 75°<sub>28</sub> (*C. r.* 138, 767 *C.* 1904 [1] 1196).
- $C_6H_{12}OBr$  2) Brommethyläther d.  $\alpha$ -Oxypentan. Sd. 74—76°<sub>18</sub> (*C. r.* 138, 814 *C.* 1904 [1] 1195).
- $C_6H_{12}O_2N$  \*19) r-Leucin. Sm. 290° u. Zers. (*H.* 37, 18 *C.* 1903 [1] 60; *C.* 1903 [2] 811; *B.* 37, 1838 *C.* 1904 [1] 1645; *Bl.* [3] 31, 1181 *C.* 1904 [2] 1710).
- \*25) Diäthylamidoessigsäure. Camphersaures Salz (*Ar.* 240, 638 *C.* 1903 [1] 24).
- \*32) Amidoformiat d.  $\delta$ -Oxy- $\beta$ -Methylbutan (Isoamylester d. Amidoameisensäure). Sm. 64,5° (*B.* 36, 2475 *C.* 1903 [2] 559; *B.* 37, 1040 *C.* 1904 [1] 1248).
- \*57) Äthylester d.  $\alpha$ -Amidobuttersäure. HCl (*B.* 37, 1273 *C.* 1904 [1] 1334).
- 61)  $\alpha$ -Oximido- $\alpha$ -Oxyhexan (Capronhydroxamsäure) (*G.* 34 [1] 432 *C.* 1904 [2] 511).
- 62)  $\alpha$ -Amidocaprinsäure. Sm. 285°. Cu (*B.* 35, 4015 *C.* 1903 [1] 390).

- $C_6H_{13}O_2N$  63) d-Isoleucin. Sm. 280° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>), Cu, Ag (*C.* 1903 [2] 811; *B.* 37, 1823 *C.* 1904 [1] 1645).
- 64) Amidoformiat d. d- $\alpha$ -Oxy- $\beta$ -Methylbutan. Sm. 61° (*B.* 37, 1041 *C.* 1904 [1] 1248).
- $C_6H_{13}O_2N_3$  5) Aethyläther d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 92° (*A.* 335, 240 *C.* 1904 [2] 1204).
- $C_6H_{13}O_3N$  11)  $\alpha$ -Amido- $\beta$ -Oxycapronsäure. Sm. 190—200° (*B.* 35, 4015 *C.* 1903 [1] 390).
- $C_6H_{13}O_3N_3$  2) Methylester d.  $\alpha$ -Semicarbazidoisobuttersäure. Sm. 106,5° (*Am.* 28, 402 *C.* 1903 [1] 90).
- $C_6H_{13}O_5N$  \*4) d-Glykosamin (*B.* 36, 28 *C.* 1903 [1] 446; *H.* 39, 423 *C.* 1903 [2] 962).
- \*5) Isoglykosamin (*C. r.* 137, 658 *C.* 1903 [2] 1237).
- $C_6H_{13}O_5N_3$  2) Semicarbazon d. d-Arabinose. Sm. 190° u. Zers. (*B.* [3] 31, 1076 *C.* 1904 [2] 1492).
- 3) Semicarbazon d. d-Xylose. Sm. 202—204° u. Zers. (*Bl.* [3] 31, 1077 *C.* 1904 [2] 1492).
- $C_6H_{13}O_6N$  \*1) d-Glykosaminsäure. Brucinsalz (*B.* 35, 4012 *C.* 1903 [1] 390; *B.* 36, 27 *C.* 1903 [1] 446).
- 10) Chitoseoxim. + 3PbO (*B.* 35, 4021 *C.* 1903 [1] 391).
- 11) Tetraoxyamidocaprinsäure (*H.* 37, 420 *C.* 1903 [1] 1147).
- $C_6H_{13}NS_2$  \*6) Diäthyläther d. Methylimidodimerkaptomethan (*C. r.* 136, 452 *C.* 1903 [1] 699).
- \*7) Methylester d. Diäthylamidodithioameisensäure (*C. r.* 136, 452 *C.* 1903 [1] 699).
- 8) Aethylenäther d. Di[ $\beta$ -Merkaptoäthyl]amin (*C. r.* 136, 452 *C.* 1903 [1] 699).
- 9) Isoamylester d. Amidodithioameisensäure. Sm. 51,5° (*C.* 1903 [1] 962).
- $C_6H_{14}ON_2$  \*7) Dipropylnitrosamin. Sd. 95—95,6°<sub>18</sub> (*B.* 36, 2477 *C.* 1903 [2] 559).
- 16) Aethylamid d. Aethylamidoessigsäure. HCl (*Ar.* 240, 633 *C.* 1903 [1] 24).
- $C_6H_{14}O_2N_2$  \*7) i- $\alpha$ -Diamidocaprinsäure (*C.* 1903 [2] 35).
- 14) isom. Diamidocaprinsäure. Pikrat (*B.* 37, 2359 *C.* 1904 [2] 423).
- $C_6H_{14}O_2N_4$  \*1) Arginin. Cu(NO<sub>3</sub>)<sub>2</sub> + 2H<sub>2</sub>O, Pikrolonat (*H.* 37, 221 *C.* 1903 [1] 566; *H.* 43, 73 *C.* 1904 [2] 1610).
- $C_6H_{14}O_4S$  \*6) Schwefelsäureäthylisobutylester. Sd. 108°<sub>13</sub> (*Am.* 30, 219 *C.* 1903 [2] 937).
- \*7) Schwefelsäurediisopropylester (*Am.* 30, 222 *C.* 1903 [2] 937).
- $C_6H_{14}O_6N_2$  2)  $\beta\gamma\delta\epsilon$ -Tetraoxyamylharnstoff (Arabinaminharnstoff). Sm. 152—153° (*C. r.* 136, 1079 *C.* 1903 [1] 1305).
- $C_6H_{14}O_6S_2$  \*2) Diäthylester d. Aethan- $\alpha\alpha$ -Disulfonsäure. Fl. (*B.* 37, 3808 *C.* 1904 [2] 1564).
- 3) Diäthylester d. Aethan- $\alpha\beta$ -Disulfonsäure. Sm. 77,5° (*B.* 37, 3806 *C.* 1904 [2] 1564).
- $C_6H_{14}O_6S$  1) Glykoseschwefligesäure. Na (*C.* 1904 [2] 57).
- $C_6H_{14}O_{10}P_2$  1) Säure (aus Mannit). Ca (*C. r.* 137, 518 *C.* 1903 [2] 1053).
- $C_6H_{14}N_3S$  7)  $\alpha$ -Methyl- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 84° (*Ar.* 242, 59 *C.* 1904 [1] 998).
- $C_6H_{14}ClTI$  1) Thalliumdipropylchlorid. Zers. bei 198—202° (*B.* 37, 2060 *C.* 1904 [2] 20).
- $C_6H_{14}JTI$  1) Thalliumdipropyljodid. Zers. bei 183—185° (*B.* 37, 2060 *C.* 1904 [2] 20).
- $C_6H_{15}ON$  20)  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylpropan. Sd. 60°<sub>48</sub> (*C. r.* 138, 767 *C.* 1904 [1] 1196).
- 21)  $\beta$ -Dimethylamidodiäthyläther. Sd. 120—121°<sub>750</sub>. (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 37, 3497 *C.* 1904 [2] 1320; *B.* 37, 3500, 3504 *C.* 1904 [2] 1320).
- $C_6H_{15}OTI$  1) Thalliumdipropylhydroxyd. Fl. Salze siehe (*B.* 37, 2060 *C.* 1904 [2] 20).
- $C_6H_{15}O_3P$  \*1) Triäthylester d. Phosphorigensäure. PtCl<sub>2</sub> (*Z. a. Ch.* 37, 398 *C.* 1904 [1] 157).
- $C_6H_{15}O_3B$  \*1) Triäthylester d. Borsäure. Sd. 119° (*B.* 36, 2221 *C.* 1903 [2] 420).
- $C_6H_{15}O_4P$  \*3) Di[ $\alpha$ -Oxyisopropyl]unterphosphorigensäure. Sm. 185° u. Zers. (*C.* 1904 [2] 1708).

- $C_6H_{15}O_5N$  \*2) Glukamin (*C.* 1904 [1] 431).  
 \*3) Galaktamin (*C.* 1904 [1] 431).  
 4) d-Glykamin (*C. r.* 137, 659 *C.* 1903 [2] 1238).  
 5) isom. d- $\zeta$ -Amido- $\alpha\beta\gamma\delta\epsilon$ -Pentaoxyhexan (d-Mannamin). Sm. 139° (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, Oxalat (*C. r.* 137, 659 *C.* 1903 [2] 1238; *C. r.* 138, 504 *C.* 1904 [1] 871).
- $C_6H_5ClS$  \*1) Triäthylsulfinchlorid (*J. pr.* [2] 66, 455 *C.* 1903 [1] 561).  
 \*2) Methyläthylpropylsulfinchlorid. + 2(6)HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*J. pr.* [2] 66, 456 *C.* 1903 [1] 561; *J. pr.* [2] 66, 527 *C.* 1903 [1] 561).  
 \*3) Methyläthylisopropylsulfinchlorid. + 2(6)HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*J. pr.* [2] 66, 526 *C.* 1903 [1] 561; *J. pr.* [2] 66, 456 *C.* 1903 [1] 561).
- $C_6H_5ClPb$  \*1) Bleitriäthylchlorid (*B.* 37, 1127 *C.* 1904 [1] 1257).
- $C_6H_5ClSi$  \*1) Siliciumtriäthylchlorid (Silicoheptylchlorid) (*C.* 1904 [1] 636).
- $C_6O_2ClBr_3$  \*1) 6-Chlor-2,3,5-Tribrom-1,4-Benzochinon. Sm. 302—303° (*C.* 1903 [2] 550).
- $C_6O_4N_2Cl_4$  1) 1,2,3,5-Tetrachlor-4,6-Dinitrobenzol. Sm. 161—162° (*B.* 35, 3855 *C.* 1903 [1] 21; *Am.* 31, 365 *C.* 1904 [1] 1407).
- $C_6O_6N_2Cl_3$  \*1) 1,3,5-Trichlor-2,4,6-Trinitrobenzol. Sm. 187° (*Am.* 31, 365 *C.* 1904 [1] 1407; *Am.* 32, 171 *C.* 1904 [2] 950).
- $C_6O_6Cl_3B$  1) Gem. Anhydrid d. Borsäure u. Trichloressigsäure. Sm. 165° (*B.* 36, 2223 *C.* 1903 [2] 420).

## — 6 IV —

- $C_6HON_2Br_3$  1) 4,5,6-Tribrom-2-Oxy-1-Diazobenzolanhydrid. Zers. bei 124° (*Soc.* 83, 811 *C.* 1903 [2] 195, 426).
- $C_6HO_3N_3Br_2$  1) 2,6-Dibrom-3-Nitro-4-Oxy-1-Diazobenzolanhydrid. Zers. bei 166° (*Soc.* 83, 810 *C.* 1903 [2] 195, 426).
- $C_6HO_4N_2Br_3$  \*3) 3,4,5-Tribrom-1,2-Dinitrobenzol. Sm. 160° (*Am.* 30, 68 *C.* 1903 [2] 355).
- $C_6HO_4N_2J_3$  \*1) 1,3,5-Trinitro-2,4-Dinitrobenzol (*Am.* 32, 300 *C.* 1904 [2] 1385).
- $C_6H_2ON_2Cl_2$  3) 4,6-Dichlor-2-Oxy-1-Diazobenzolanhydrid. Sm. 83—84°, 110° (*C.* 1903 [1] 394).
- $C_6H_2ON_2Br_2$  \*1) 3,5-Dibrom-2-Oxy-1-Diazobenzolanhydrid. Sm. 140° u. Zers. (*Soc.* 83, 803 *C.* 1903 [2] 425).  
 5) 4,6-Dibrom-2-Oxy-1-Diazobenzolanhydrid. Zers. bei 140° (*C.* 1903 [1] 394).
- $C_6H_2ON_2Br_4$  1) 2,3,4,6-Tetrabromdiazobenzol. Sulfat (*Soc.* 83, 810 *C.* 1903 [2] 426).
- $C_6H_2ONCl_3$  5) 2,3,5-Trichlorpyridin-4-Carbonsäure. Sm. 188—189° (*Soc.* 83, 400 *C.* 1903 [1] 841, 1141).
- $C_6H_2O_2NBr_3$  \*5) 3,4,5-Tribrom-1-Nitrobenzol. Sm. 112° (*Am.* 30, 58 *C.* 1903 [2] 354).
- $C_6H_2O_2NJ_3$  2) 2,4,5-Trijod-1-Nitrobenzol. Sm. 124° (*C. r.* 137, 1065 *C.* 1904 [1] 266).
- $C_6H_2O_2ClBr_3$  \*1) 2-Chlor-3,5,6-Tribrom-1,4-Dioxybenzol. Sm. 239° (*C.* 1903 [2] 550).
- $C_6H_2O_3NBr_3$  3) 4,5,6-Tribrom-2-Nitro-1-Oxybenzol. Sm. 120—121°. Ag (*Am.* 30, 72 *C.* 1903 [2] 355).
- $C_6H_2O_3N_3Br_3$  1) 2,4,6-Tribrom-3-Nitrodiazobenzol. Sulfat (*Soc.* 83, 809 *C.* 1903 [2] 426).
- $C_6H_2O_4N_2Cl_2$  4) 3,4-Dichlor-1,2-Dinitrobenzol. Sm. 55° (*B.* 37, 3892 *C.* 1904 [2] 1611).  
 5) 4,5-Dichlor-1,2-Dinitrobenzol. Sm. 110° (114°) (*R.* 21, 419 *C.* 1903 [1] 503; *Soc.* 85, 867 *C.* 1904 [2] 518; *B.* 37, 3892 *C.* 1904 [2] 1611).
- $C_6H_2O_4N_3Br_2$  7) 2,5-Dibrom-1,4-Dinitrobenzol. Sm. 127° (*Am.* 28, 456 *C.* 1903 [1] 322).
- $C_6H_2O_4N_3J_2$  \*1) 2,4[oder 4,6]-Dijod-1,3-Dinitrobenzol. Sm. 160° (*Am.* 32, 304 *C.* 1904 [2] 1385).  
 2) 1,3-Dijod-2-Dinitrobenzol. Sm. 168,4° (*J.* 1875, 325; 1880, 478; *C. r.* 139, 64 *C.* 1904 [2] 590). — II, 90.
- $C_6H_2O_6N_3Cl$  2) 5-Chlor-1,2,4-Trinitrobenzol. Sm. 116° (*B.* 36, 3953 *C.* 1904 [1] 363).

- $C_6H_2O_6N_3Br$  1) 1-Brom-2, 4, 6-Trinitrobenzol. Sm. 122–123° (*Am.* 29, 212 *C.* 1903 [1] 964).
- $C_6H_2N_2ClJ_3$  1) 2, 4, 6-Trijod-1-Diazobenzolchlorid. Zers. oberh. 120° (*B.* 36, 2070 *C.* 1903 [2] 358).
- $C_6H_2N_2Br_3F$  1) 2, 4, 6-Tribromdiazobenzolfluorid.  $HF + 2H_2O$  (*B.* 36, 2060 *C.* 1903 [2] 357).
- $C_6H_3ON_2Cl_3$  1) 2, 4, 6-Trichlordiazobenzol. K, Nitrat, Sulfat (*C.* 1903 [1] 394; *Soc.* 83, 807 *C.* 1903 [2] 426).
- $C_6H_3ON_2Br$  1) 6-Brom-2-Oxy-1-Diazobenzolanhydrid. Sm. 103° u. Zers. (*Soc.* 83, 812 *C.* 1903 [2] 426).
- $C_6H_3ON_2Br_3$  \*2) 2, 4, 6-Tribrom-1-Nitrosamidobenzol. Sm. 85° (*C.* 1903 [1] 394; *B.* 36, 2072 *C.* 1903 [2] 358).
- $C_6H_3O_2NCl_2$  \*1) 2, 4-Dichlor-1-Nitrobenzol. Sm. 33° (*Soc.* 85, 868 *C.* 1904 [2] 518).
- \*2) 2, 5-Dichlor-1-Nitrobenzol. Sm. 54° (*Soc.* 85, 868 *C.* 1904 [2] 518).
- \*3) 3, 4-Dichlor-1-Nitrobenzol. Sm. 43° (*Soc.* 85, 867 *C.* 1904 [2] 518).
- 11) 5, 6-Dichlorpyridin-3-Carbonsäure +  $H_2O$ . Sm. 162–163° wasserfrei (*B.* 37, 3832 *C.* 1904 [2] 1614).
- $C_6H_3O_2NJ_2$  \*1) 3, 4-Dijod-1-Nitrobenzol. Sm. 112,5° (*C. r.* 136, 1077 *C.* 1903 [1] 1339).
- \*5) 3, 5-Dijod-1-Nitrobenzol. Sm. 103° (*C. r.* 136, 236 *C.* 1903 [1] 574).
- 6) 2, 4-Dijod-1-Nitrobenzol. Sm. 101° (*C. r.* 139, 63 *C.* 1904 [2] 590).
- 7) 2, 6-Dijod-1-Nitrobenzol. Sm. 114° (*C. r.* 138, 1505 *C.* 1904 [2] 319; *Bl.* [3] 31, 974 *C.* 1904 [2] 1114).
- $C_6H_3O_2N_2Br_3$  \*2) 4, 5, 6-Tribrom-2-Nitro-1-Amidobenzol. Sm. 166° (*R.* 21, 414 *C.* 1903 [1] 505; *Am.* 30, 74 *C.* 1903 [2] 355).
- $C_6H_3O_2NBr_2$  \*1) 4, 6-Dibrom-2-Nitro-1-Oxybenzol. Sm. 117,5° (*A.* 333, 363 *C.* 1904 [2] 1117; *C.* 1904 [2] 1697).
- 7) 3, 6-Dibrom-2-Nitro-1-Oxybenzol. Sm. 77°. Ba (*Am.* 28, 473 *C.* 1903 [1] 323).
- $C_6H_3O_2N_3Br_2$  1) 4, 6-Dibrom-3-Nitrodiazobenzol. Sulfat (*Soc.* 83, 814 *C.* 1903 [2] 426).
- $C_6H_3O_4NBr_2$  3) 2, 6-Dibrom-4-Nitro-1, 3-Dioxybenzol. Sm. 148–149° (*A.* 333, 360 *C.* 1904 [2] 1116).
- $C_6H_3O_6N_2Br$  \*2) 2-Brom-4, 6-Dinitro-1, 3-Dioxybenzol. Sm. 191–192° (*A.* 333, 362 *C.* 1904 [2] 1116).
- $C_6H_3O_6N_3S$  2) 3-Nitro-2-Oxydiazolbenzol-5-Sulfonsäure (D.R.P. 141750 *C.* 1903 [1] 1324).
- $C_6H_4ONCl$  \*2) 1, 4-Benzochinonchlorimid (*B.* 36, 2980 *C.* 1903 [2] 980).
- $C_6H_4O_2NCl$  \*1) 2-Chlor-1-Nitrobenzol (D.R.P. 137847 *C.* 1903 [1] 208).
- \*3) 4-Chlor-1-Nitrobenzol (D.R.P. 137847 *C.* 1903 [1] 208).
- 11) 5-Chlorpyridin-3-Carbonsäure. Sm. 170–171° (*B.* 37, 3834 *C.* 1904 [2] 1614).
- $C_6H_4O_2NBr_3$  2) 3, 4, 5-Tribrom-1-Methylpyrrol-2-Carbonsäure (*B.* 37, 2802 *C.* 1904 [2] 533).
- $C_6H_4O_2NJ$  \*1) 2-Jod-1-Nitrobenzol. Sm. 49° (*C.* 1903 [2] 1109).
- \*3) 4-Jod-1-Nitrobenzol. Sm. 171–177° (*C.* 1903 [2] 1109).
- $C_6H_4O_2N_2Cl_2$  \*3) 4, 5-Dichlor-2-Nitro-1-Amidobenzol. Sm. 176° (*R.* 21, 420 *C.* 1903 [1] 503; *B.* 37, 3893 *C.* 1904 [2] 1611).
- \*4) 4, 6-Dichlor-2-Nitro-1-Amidobenzol. Sm. 100° (*A.* 330, 17, 27 *C.* 1904 [1] 1140).
- $C_6H_4O_2N_2Br_2$  \*2) 4, 5-Dibrom-2-Nitro-1-Amidobenzol. Sm. 204° (*R.* 21, 414 *C.* 1903 [1] 505).
- \*4) 2, 6-Dibrom-4-Nitro-1-Amidobenzol. Sm. 204° (*A.* 330, 45 *C.* 1904 [1] 1141).
- 8) 2, 5-Dibrom-4-Nitro-1-Amidobenzol. Sm. 174–175° (*Am.* 28, 463 *C.* 1903 [1] 323).
- $C_6H_4O_2N_3J_2$  \*1) 2, 4-Dijod-3-Nitro-1-Amidobenzol. Sm. 125° (*C. r.* 138, 1504 *C.* 1904 [2] 319; *Bl.* [3] 31, 973 *C.* 1904 [2] 1114).
- 4) 2, 6-Dijod-3-Nitro-1-Amidobenzol. Sm. 149° (*C. r.* 138, 1504 *C.* 1904 [2] 319; *C. r.* 139, 63 *C.* 1904 [2] 590).
- $C_6H_4O_2N_3F$  1) 4-Nitrodiazobenzolfluorid.  $2HF + H_2O$  (*B.* 36, 2061 *C.* 1903 [2] 357).

- $C_6H_4O_2NCl$  13) 5-Chlor-6-Oxypyridin-3-Carbonsäure. Sm. 308° u. Zers. (B. 37, 3832 C. 1904 [2] 1614).  
 $C_6H_4O_2NBr$  \*1) 4-Brom-2-Nitro-1-Oxybenzol. Sm. 89—90° (A. 333, 353 C. 1904 [2] 1116).  
 $C_6H_4O_2N_2S$  \*6) 1-Diazobenzol-4-Sulfonsäure (A. 330, 14 C. 1904 [1] 1138).  
 $C_6H_4O_2Br_2S$  \*5) 3,5-Dibrombenzol-1-Sulfonsäure (Am. 29, 223 C. 1903 [1] 963).  
 $C_6H_4O_2N_2S$  4) Inn. Anhydrid d. 4-Oxy-1-Diazobenzol-2-Sulfonsäure (J. pr. [2] 69, 339 C. 1904 [2] 37).  
 $C_6H_4O_2Br_2S_2$  1) Bromid d. Benzol-1,3-Disulfinsäure. Sm. 52° (J. pr. [2] 68, 318 C. 1903 [2] 1170).  
 $C_6H_4O_2J_2S$  \*1) 2,6-Dijod-1-Oxybenzol-4-Sulfonsäure. (NH<sub>4</sub>, HF), (K, HF), (Rb, HF) (A. 328, 147 C. 1903 [2] 992).  
 $C_6H_4O_2NBr$  2) 5-[oder 6]-Brom-4-Nitro-1,2,3-Trioxybenzol. Sm. 122° (B. 37, 116 C. 1904 [1] 585).  
 $C_6H_4O_2N_2S$  \*2) 1,3-Dinitrobenzol-5-Sulfonsäure. Ba + 3H<sub>2</sub>O (Am. 29, 218 C. 1903 [1] 963).  
 $C_6H_4NClBr_2$  \*2) 4-Chlor-2,6-Dibrom-1-Amidobenzol. Sm. 95° (A. 333, 338 C. 1904 [2] 1151).  
 $C_6H_4N_2BrF$  1) 4-Bromdiazobenzolfluorid (B. 36, 2060 C. 1903 [2] 357).  
 $C_6H_4BrJF_2$  1) 4-Brombenzol-1-Jodidfluorid. Sm. 110° (A. 328, 139 C. 1903 [2] 990).  
 $C_6H_4OJF_2$  \*1) Benzoljodofluorid. Zers. bei 216° (A. 328, 135 C. 1903 [2] 990).  
 $C_6H_4O_2NBr_2$  3) 2,6-Dibrom-4-Amido-1,3-Dioxybenzol. HCl (A. 333, 361 C. 1904 [2] 1116).  
 4) 3,4-Dibrom-1-Methylpyrrol-2-Carbonsäure (B. 37, 2801 C. 1904 [2] 533).  
 $C_6H_5O_2NS$  \*1) 4-Nitro-1-Merkaptobenzol. Sm. 78° (J. pr. [2] 66, 553 C. 1903 [1] 508).  
 $C_6H_5O_2N_2Cl$  \*3) 5-Chlor-2-Nitro-1-Amidobenzol. Sm. 115° (B. 36, 4027 C. 1904 [1] 294).  
 $C_6H_5O_2N_2Br$  \*3) 5-Brom-2-Nitro-1-Amidobenzol (R. 21, 413 C. 1903 [1] 505).  
 $C_6H_5O_2N_2J$  5) 6-Jod-3-Nitro-1-Amidobenzol. Sm. 160,5° (C. r. 138, 1503 C. 1904 [2] 319).  
 $C_6H_5O_2N_2Br_2$  1) 2,6-Dibrom-4-Nitro-1,3-Diamidobenzol. Sm. 189—190° (Am. 30, 76 C. 1903 [2] 355).  
 $C_6H_5O_2BrS_2$  1) 4-Brombenzol-1-Thiosulfonsäure. Na, p-Phenylendiaminsalz (J. pr. [2] 70, 391 C. 1904 [2] 1721).  
 $C_6H_5O_2JS_2$  \*1) 4-Jodbenzol-1-Thiolsulfonsäure. p-Phenylendiaminsalz (J. pr. [2] 70, 392 C. 1904 [2] 1721).  
 $C_6H_5O_2N_2Cl$  2) 4-Chlor-6-Nitro-2-Amido-1-Oxybenzol. Sm. 152° (D.R.P. 147060 C. 1904 [1] 233).  
 3) 6-Chlor-2-Nitro-4-Amido-1-Oxybenzol. Sm. 130° (D.R.P. 147060 C. 1904 [1] 233).  
 $C_6H_5O_2N_2Br$  3) 3-Brom-1-Amido-2-Keto-1,2-Dihydropyridin-5-Carbonsäure. Sm. 238° (B. 37, 3839 C. 1904 [2] 1615).  
 $C_6H_5O_2NS$  \*1) 2-Nitrobenzol-1-Sulfonsäure. K (J. pr. [2] 66, 554 C. 1903 [1] 508).  
 \*2) 3-Nitrobenzol-1-Sulfonsäure (J. pr. [2] 66, 559 C. 1903 [1] 518).  
 \*3) 4-Nitrobenzol-1-Sulfonsäure. K + H<sub>2</sub>O (J. pr. [2] 66, 553 C. 1903 [1] 508).  
 $C_6H_5O_2N_2S$  \*1) Amid d. 1,3-Dinitrobenzol-5-Sulfonsäure. Sm. 234—235° (Am. 29, 220 C. 1903 [1] 963).  
 $C_6H_5O_{10}NS_2$  2) 2-Nitro-1,3-Dioxybenzol-4,6-Disulfonsäure. K<sub>2</sub> (B. 37, 726 C. 1904 [1] 1005).  
 $C_6H_5ONCl$  4) 3-Chlor-4-Amido-1-Oxybenzol (D.R.P. 143449 C. 1903 [2] 320).  
 $C_6H_5O_2NBr$  2) 3[oder 4]-Brom-1-Methylpyrrol-2-Carbonsäure (B. 37, 2802 C. 1904 [2] 533).  
 $C_6H_5O_2N_2Br_2$  2) Dilaktam d.  $\alpha\delta$ -Dibrom- $\beta\gamma$ -Diamidobutan- $\alpha\delta$ -Dicarbonsäure (B. 35, 4126 C. 1903 [1] 136).  
 $C_6H_5O_2N_2S$  3) p-Acetylamidothiazol-p-Carbonsäure. Sm. 166° (B. 36, 3549 C. 1903 [2] 1379).  
 $C_6H_5O_2N_2S$  8) 1-Nitramidobenzol-4-Sulfonsäure. Na + H<sub>2</sub>O, Na<sub>2</sub>, BaH, Ba, Ag (A. 330, 29 C. 1904 [1] 1141).

- $C_6H_5O_6N_4S$  1) 2,6-Di[Diazo]-1-Oxybenzol-4-Sulfonsäure (D.R.P. 148085 *C.* 1904 [1] 135).
- $C_6H_5N_2Cl_2S$  1) Methyläther d. 4,6-Dichlor-2-Merkapto-5-Methyl-1,3-Diazin. Sm. 64°; Sd. 153–154°<sub>18</sub> (*Am.* 32, 353 *C.* 1904 [2] 1414).
- $C_6H_7ONS_2$  1) 2-Thiocarbonyl-4-Keto-3-Allyltetrahydrothiazol. Fl. (*M.* 24, 504 *C.* 1903 [2] 836).
- $C_6H_7O_2NS$  \*6) Amid d. Benzolsulfonsäure. Sm. 151°.  $H_2SO_4$  (*B.* 37, 692 *C.* 1904 [1] 1074).
- $C_6H_7O_2N_2Cl$  3) Dimethyläther d. 6-Chlor-2,4-Dioxy-1,3-Diazin. Sm. 73° (*B.* 36, 2234 *C.* 1903 [2] 449; *B.* 36, 3379 *C.* 1903 [2] 1192).
- $C_6H_7O_2N_3S$  1) Amid d. *p*-Acetylamidothiazol-*p*-Carbonsäure. Zers. oberh. 250° (*B.* 36, 3549 *C.* 1903 [2] 1379).
- $C_6H_7O_3NS$  \*4) Phenylsulfaminsäure. Sm. noch nicht bei 280° (D.R.P. 151134 *C.* 1904 [1] 1381; *A.* 333, 288 *C.* 1904 [2] 904).
- $C_6H_7O_4NS$  9) 4-Amido-1-Oxybenzol-3-Sulfonsäure +  $H_2O$ . K, Ba (D.R.P. 150982 *C.* 1904 [1] 1235; D.R.P. 153123 *C.* 1904 [2] 574; *J. pr.* [2] 69, 336 *C.* 1904 [2] 36).
- $C_6H_7O_6NS$  2) 4-Amid d. 2-Methylfuran-5-Carbonsäure-4-Sulfonsäure. Sm. 217–218°. K +  $H_2O$ , Ba + 3  $H_2O$ , Pb, Ag (*Am.* 32, 193 *C.* 1904 [2] 1139).
- $C_6H_7N_2ClS$  1) Aethyläther d. 4-Chlor-2-Merkapto-1,3-Diazin. Sd. 135°<sub>24</sub> (*Am.* 29, 496 *C.* 1903 [1] 1310; *Am.* 31, 596 *C.* 1904 [2] 243).
- $C_6H_8ON_2S$  \*4) Methyläther d. 2-Merkapto-4-Keto-6-Methyl-3,4-Dihydro-1,3-Diazin. Sm. 219° (*Am.* 29, 486 *C.* 1903 [1] 1309).
- 5) Methyläther d. 2-Merkapto-4-Keto-5-Methyl-3,4-Dihydro-1,3-Diazin. Sm. 233° (*Am.* 29, 487 *C.* 1903 [1] 1309).
- 6) Aethyläther d. 2-Merkapto-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 152° (*Am.* 29, 484 *C.* 1903 [1] 1309).
- 7) 2-Thiocarbonyl-4-Keto-3,6-Dimethyl-1,2,3,4-Tetrahydro-1,3-Diazin. Sm. 271–273° (*A.* 329, 348 *C.* 1904 [1] 435).
- $C_6H_8O_2N_2S$  8) Methyläther d. 2-Merkapto-4,6-Diketo-5-Methyl-3,4,5,6-Tetrahydro-1,3-Diazin. Zers. bei 303° (*Am.* 32, 353 *C.* 1904 [2] 1414).
- 9) 2-Thiocarbonyl-4,6-Diketo-5-Aethylhexahydro-1,3-Diazin +  $xH_2O$ . Sm. 190–191° (wasserfrei) (*Am.* 32, 352 *C.* 1904 [2] 1414).
- 10) Aethyläther d. 5-Methyl-1,2,3-Thiodiazol-4-Carbonsäure. Sm. 35° (*A.* 325, 177 *C.* 1903 [1] 646; *A.* 333, 6 *C.* 1904 [2] 780).
- $C_6H_8O_3N_2S$  \*2) 1,2-Diamidobenzol-4-Sulfonsäure (*A.* 330, 23 *C.* 1904 [1] 1139).
- \*6) 1,4-Diamidobenzol-2-Sulfonsäure + 2  $H_2O$  (*B.* 37, 2912 *C.* 1904 [2] 1458).
- $C_6H_8O_3N_2Se$  1) Aethylester d. Selencyanacetylamidoameisensäure. Fl. (*Ar.* 241, 199 *C.* 1903 [2] 103).
- $C_6H_8O_4N_2S$  4) 2,6-Diamido-1-Oxybenzol-4-Sulfonsäure (D.R.P. 147880 *C.* 1904 [1] 135; D.R.P. 148212 *C.* 1904 [1] 487).
- 5) Diamid d. 2-Methylfuran-5-Carbonsäure-4-Sulfonsäure. Sm. 196–197° (*Am.* 32, 190 *C.* 1904 [2] 1138).
- $C_6H_8O_6N_2S_2$  7) Di[Hydroxylamid] d. Benzol-1,3-Disulfonsäure (1,3-Benzoldisulfhydroxamsäure). Sm. 152°. +  $\frac{1}{2}C_6H_6$  (*G.* 33 [2] 309 *C.* 1904 [1] 288).
- $C_6H_8O_6N_2S_4$  \*1) 1,4-Diamidobenzol-2,5-Di[Thiosulfonsäure] + 2  $H_2O$ . K<sub>2</sub> + 2  $H_2O$  (*Soc.* 83, 1204 *C.* 1903 [2] 1328).
- $C_6H_8O_{12}N_2S_8$  \*1) 1,4-Diamidobenzol-2,3,5,6-Tetra[Thiosulfonsäure]. K<sub>4</sub> (*Soc.* 83, 1210 *C.* 1903 [2] 1328).
- $C_6H_8N_3BrS$  1) Aethyläther d. 5-Brom-4-Amido-2-Merkapto-1,3-Diazin. Sm. 123–124° (*Am.* 31, 604 *C.* 1904 [2] 243).
- $C_6H_8ON_5S$  1) 4-[ $\alpha$ -Semicarbazonäthyl]-5-Methyl-1,2,3-Thiodiazol. Sm. 230° (*A.* 325, 176 *C.* 1903 [1] 646).
- $C_6H_8O_4N_4Cl$  1) Chloracetylamidoacetylamidoessigsäure. Sm. 178–180° (*B.* 36, 2114 *C.* 1903 [2] 346; *B.* 37, 2500 *C.* 1904 [2] 426).
- $C_6H_{10}OCIBr$  1) Chlorid d.  $\alpha$ -Bromisocaproensäure. Sd. 68–71°<sub>11–12</sub> (*B.* 36, 2989 *Ann.* *C.* 1903 [2] 1112; *B.* 37, 2492 *Ann.* *C.* 1904 [2] 425).
- $C_6H_{10}O_2NCl$  \*5) Aethylester d.  $\beta$ -Chloramidocrotonsäure (*A.* 329, 367 *C.* 1904 [1] 436).
- $C_6H_{10}O_3NBr_3$  1) Aethylester d.  $\alpha\alpha\beta$ -Tribrom- $\beta$ -Amidobuttersäure (*C.* 1904 [1] 1067).

- $C_6H_{10}O_3Cl_4Hg_4$  1) Verbindung (aus d. Verb.  $C_{14}H_{22}O_{11}Hg_4$ ) (B. 36, 3703 C. 1903 [2] 1239).
- $C_6H_{11}ONJ_2$  1) Amid d.  $\alpha\alpha$ -Dijodpentan- $\alpha$ -Carbonsäure (B. 37, 1275 C. 1904 [1] 1334).
- $C_6H_{11}O_2NBr_2$  1) Aethyl ester d.  $\alpha\beta$ -Dibrom- $\beta$ -Amidobuttersäure. Fl. (C. 1904 [1] 1067).
- $C_6H_{11}O_4NS$  1) 2-Merkapto-5-[ $\alpha\beta\gamma$ -Trioxypentyl]-4,5-Dihydrooxazol (Merkapto-arabinosaxolin). Sm. 172,5° (C. r. 136, 1081 C. 1903 [1] 1305).
- $C_6H_{11}NBr_3S$  1)  $\beta\gamma$ -Dibrompropylamid d. Thiopropionsäure. Sm. 179° (B. 37, 877 C. 1904 [1] 1004).
- $C_6H_{12}ONBr$  2)  $\gamma$ -Brom- $\beta$ -Nitro- $\beta\gamma$ -Dimethylbutan (B. 37, 546 C. 1904 [1] 865).  
3) Methyläther d.  $\beta$ -Brom- $\gamma$ -Oximido- $\beta$ -Methylbutan. Fl. (B. 37, 540 C. 1904 [1] 865).
- $C_6H_{12}ONBr$  4) Amid d.  $\gamma$ -Brompentan- $\gamma$ -Carbonsäure. Sm. 66—67° (C. 1904 [2] 1666).
- $C_6H_{12}ON_2S$  2) Amid d.  $\alpha$ -Acetylamidothioisobuttersäure. Sm. 162° (B. 37, 1923 C. 1904 [2] 196).
- $C_6H_{12}OJ_2Hg_2$  1) Diisopropyläther- $\beta\beta'$ -Diquecksilberjodid (B. 36, 3705 C. 1903 [2] 1239).
- $C_6H_{12}O_4N_3S_2$  \*1) Di[ $\beta$ -Amidoäthyl]disulfid- $\beta\beta'$ -Dicarbonsäure (Cystin) (B. 36, 2720 C. 1903 [2] 827; H. 38, 557 C. 1903 [2] 389; H. 39, 350 C. 1903 [2] 792).
- $C_6H_{12}N_4Cl_2J_2$  1) Hexamethylenamindichlorojodid (C. r. 136, 1472 C. 1903 [2] 297).
- $C_6H_{13}O_2ClS$  \*1) Diäthylthetinchlorid. +  $6HgCl_2$  (J. pr. [2] 66, 465 C. 1903 [1] 561).
- $C_6H_{14}NCl_2P$  1) Dipropylamidodichlorphosphin. Sd. 220—223° (A. 326, 155 C. 1903 [1] 761).
- $C_6H_{14}NCl_4P$  1) Dipropylamidophosphortetrachlorid. +  $PCl_5$  (A. 326, 159 C. 1903 [1] 761).
- $C_6H_{16}ONCl$  5) Aethyläther d. Oxytetramethylammoniumchlorid. 2 +  $PtCl_4$ , +  $AuCl_3$  (A. 334, 63 C. 1904 [2] 949).
- $C_6H_{16}O_2NCl$  3) Dimethyläther d.  $\alpha\alpha'$ -Dioxytetramethylammoniumchlorid. 2 +  $PtCl_4$ , +  $AuCl_3$  (A. 334, 57 C. 1904 [2] 949).
- $C_6H_{16}O_3NP$  1) Dimethylmonamid d. Phosphorsäurediäthylester. Sd. 85 bis 90° (A. 326, 180 C. 1903 [1] 819).
- $C_6H_{18}N_3SP$  1) Tri[Aethylamid] d. Thiophosphorsäure. Sm. 68° (A. 326, 206 C. 1903 [1] 821).
- $C_6O_4N_2ClBr_3$  1) 5-Chlor-2,4,6-Tribrom-1,3-Dinitrobenzol. Sm. 208° (Am. 31, 375 C. 1904 [1] 1408).

## — 6 V —

- $C_6HO_2NClBr_3$  1) 3-Chlor-2,4,6-Tribrom-1-Nitrobenzol. Sm. 149—150° (A. 330, 26 C. 1904 [1] 1140).
- $C_6H_2O_9N_2Br_2S$  3) 2,6-Dibrom-1-Diazobenzol-4-Sulfonsäure (A. 330, 37 C. 1904 [1] 1141).
- $C_6H_3ONCl_2P$  1) 2,4,6-Trichlorphenylmonamid d. Phosphorsäuredichlorid. Sm. 128° (A. 326, 230 C. 1903 [1] 867).
- $C_6H_3O_8NClBr$  \*2) 6-Chlor-4-Brom-2-Nitro-1-Oxybenzol. Sm. 112° (C. 1904 [2] 1697).
- $C_6H_3O_8NBrJ$  \*1) 4-Brom-6-Jod-2-Nitro-1-Oxybenzol. Sm. 104,2° (C. 1904 [2] 1697).
- $C_6H_3O_6N_2ClS$  \*1) Chlorid d. 1,3-Dinitrobenzol-5-Sulfonsäure. Sm. 98—99° (Am. 29, 220 C. 1903 [1] 963).
- $C_6H_4ONCl_2P$  1) 2,4-Dichlorphenylmonamid d. Phosphorsäuredichlorid. Sm. 126° (A. 326, 228 C. 1903 [1] 867).
- $C_6H_4OBrJF_2$  1) 4-Brombenzol-1-Jodfluorid. Zers. bei 225° (A. 328, 137 C. 1903 [2] 990).
- $C_6H_4O_3NCl_3S$  1) 2,5,6-Trichlor-1-Amidobenzol-3-Sulfonsäure (D.R.P. 139327 C. 1903 [1] 747).
- $C_6H_4O_4N_2Cl_3S$  1) Dichloramid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 121° (C. 1904 [2] 435).
- $C_6H_4O_4N_2Cl_3S_2$  1) Di[Dichloramid] d. Benzol-1,3-Disulfonsäure. Sm. 128° (C. 1904 [2] 435).

- $C_6H_4O_5N_2Cl_2S$  1) 3,6-Dichlor-2-Oxydiazobenzol-5-Sulfonsäure (D.R.P. 139327 *C.* 1903 [1] 747).
- $C_6H_4O_5N_2Br_2S$  1) 2,6-Dibrom-1-Nitrobenzol-4-Sulfonsäure. Na +  $H_2O$ , Na<sub>2</sub>, Ca, Ba +  $2\frac{1}{2}H_2O$  (*A.* 330, 42 *C.* 1904 [1] 1141).
- $C_6H_5O_2NCl_2S$  \*1) Dichloramid d. Benzolsulfonsäure. Sm. 76° (*C.* 1904 [2] 435).
- $C_6H_5O_3NCl_2S$  2) 4,6-Dichlor-1-Amidobenzol-3-Sulfonsäure (*A.* 330, 55 *C.* 1904 [1] 1142).
- $C_6H_5O_3NBr_2S$  \*4) 4,6-Dibrom-1-Amidobenzol-3-Sulfonsäure (*A.* 330, 57 *C.* 1904 [1] 1142).
- $C_6H_5O_3N_2Cl_2P$  1) 3-Nitrophenylmonamid d. Phosphorsäuredichlorid. Sm. 94° (*A.* 326, 237 *C.* 1903 [1] 867).
- 2) 4-Nitrophenylmonamid d. Phosphorsäuredichlorid. Sm. 156° (*A.* 326, 237 *C.* 1903 [1] 867).
- $C_6H_5O_5N_2ClS$  2) 2-Chlor-3-Nitro-1-Amidobenzol-5-Sulfonsäure (D.R.P. 141538 *C.* 1903 [1] 1381; D.R.P. 141750 *C.* 1903 [1] 1324).
- $C_6H_5ONClHg$  1) Verbindung (aus Quecksilberacetamid u. salzs. Anilin) (*M.* 23, 1157 *C.* 1903 [1] 385).
- $C_6H_5ONCl_2P$  \*1) Phenylamid d. Phosphorsäuredichlorid. Sm. 84° (*A.* 326, 223 *C.* 1903 [1] 866).
- $C_6H_5O_3NCl_2P$  1) 2,4-Dichlorphenylmonamid d. Phosphorsäure. Sm. 167° Cu (*A.* 326, 228 *C.* 1903 [1] 867).
- $C_6H_5O_3NBr_2P$  1) 2,4-Dibromphenylmonamid d. Phosphorsäure. Cu (*A.* 326, 235 *C.* 1903 [1] 867).
- $C_6H_5O_4NClS$  4) 4-Chlor-2-Amido-1-Oxybenzol-*p*-Sulfonsäure (D.R.P. 144618 *C.* 1903 [2] 974).
- $C_6H_5N_2ClBrS$  1) Aethyläther d. 4-Chlor-5-Brom-2-Merkapto-1,3-Diazin. Sm. 27° (*Am.* 31, 603 *C.* 1904 [2] 243).
- $C_6H_7ON_2BrS$  1) Aethyläther d. 5-Brom-2-Merkapto-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 189° (*Am.* 31, 603 *C.* 1904 [2] 243).
- $C_6H_7O_3NBrP$  1) 4-Bromphenylmonamid d. Phosphorsäure. Sm. 158° (*A.* 326, 231 *C.* 1903 [1] 867).
- $C_6H_7O_3N_2ClS$  1) 2-Chlor-1,3-Diamidobenzol-5-Sulfonsäure +  $H_2O$  (D.R.P. 150373 *C.* 1904 [1] 1044).
- $C_6H_{10}ONJHg$  1) 3-Methyl-4,5-Dihydro-1,2-Oxazin[6]-6-Methylquecksilberjodid. Sm. 122° (*A.* 329, 180 *C.* 1903 [2] 1413).
- $C_6H_{11}OBr_2Hg_2$  1) Diisopropyläther- $\beta\beta'$ -Diquecksilberbromid (*B.* 36, 3705 *C.* 1903 [2] 1239).
- $C_6H_{14}ONCl_2P$  \*1) Dipropylmonamid d. Phosphorsäuredichlorid. Sd. 243—244° (*A.* 326, 184 *C.* 1903 [1] 820).
- $C_6H_{14}NCl_2SP$  \*1) Dipropylmonamid d. Thiophosphorsäuredichlorid. Sd. 240—245° u. Zers. (*A.* 326, 212 *C.* 1903 [1] 822).
- $C_6H_{15}ONClP$  1) Diäthylmonamid d. Aethylphosphinsäuremonochlorid. Sd. 90 bis 92°<sub>18</sub> (*A.* 326, 155 *C.* 1903 [1] 761).
- $C_6H_{16}O_2NClP$  1) Diäthylmonamid d. Aethylphosphorsäuremonochlorid. Sd. 113°<sub>18</sub> (*A.* 326, 189 *C.* 1903 [1] 820).
- $C_6H_{18}ON_2ClP$  1) Di[Propylamid] d. Phosphorsäuremonochlorid. Sm. 88° (*A.* 326, 176 *C.* 1903 [1] 819).
- $C_6H_{16}O_2NSP$  1) Dimethylmonamid d. Thiophosphorsäurediäthylester. Sd. 107°<sub>45</sub> (*A.* 326, 210 *C.* 1903 [1] 822).
- 2) Aethylmonamid d. Thiophosphorsäurediäthylester. Sd. 94°<sub>12</sub> (*A.* 326, 203 *C.* 1903 [1] 821).

- $C_6H_5ONCl_2Br_3P$  1) 2,4,6-Tribromphenylmonamid d. Phosphorsäuredichlorid. Sm. 148° (*A.* 326, 236 *C.* 1903 [1] 867).
- $C_6H_4ONCl_2Br_2P$  1) 2,4-Dibromphenylmonamid d. Phosphorsäuredichlorid. Sm. 134° (*A.* 326, 234 *C.* 1903 [1] 867).
- $C_6H_5ONCl_2BrP$  1) 3-Bromphenylmonamid d. Phosphorsäuredichlorid. Sm. 87° (*A.* 326, 234 *C.* 1903 [1] 867).
- 2) 4-Bromphenylmonamid d. Phosphorsäuredichlorid. Sm. 98° (*A.* 326, 230 *C.* 1903 [1] 867).
- $C_6H_5O_3N_2ClBr_2S$  1) Verbindung (aus 2,6-Dibrom-1-Diazobenzol-4-Sulfonsäure). Na, Ba (*A.* 330, 39 *C.* 1904 [1] 1141).

C<sub>7</sub>-Gruppe.

- C<sub>7</sub>H<sub>8</sub> \*1) Methylbenzol. Sm. —97 bis —99° (B. 36, 2117 C. 1903 [2] 350; B. 36, 3086 C. 1903 [2] 990; C. 1904 [1] 1195).
- C<sub>7</sub>H<sub>10</sub> \*3) Suberen (Suberoterpen) Sd. 120—126° (A. 327, 68 C. 1903 [1] 1124).
- C<sub>7</sub>H<sub>12</sub> \*13) βδ-Dimethyl-αγ-Pentadien. Sd. 92—93°<sub>760</sub> (B. 37, 3579 C. 1904 [2] 1376).
- \*14) 5-Methyl-1,2,3,4-Tetrahydrobenzol. Sd. 106—107° (109°<sub>760</sub>) (A. 289, 343; B. 35, 2494, 2823; A. 329, 369 C. 1904 [1] 516; C. 1904 [1] 1213).
- 19) 1-Methyl-2-Tetrahydrobenzol. Sd. 106—107° (C. 1903 [1] 329).
- 20) r-2-Methyl-1,2,3,4-Tetrahydrobenzol. Sd. 103,5°<sub>760</sub> (C. 1904 [1] 1213).
- 21) 2-Methyl-1,2,3,4-Tetrahydrobenzol. Sd. 101,9°<sub>760</sub> (103°<sub>760</sub>) (C. 1903 [2] 289; B. 37, 1377 C. 1904 [1] 1441; C. 1904 [1] 1213).
- 22) Kohlenwasserstoff (aus 1-Oxy-1-Methylhexahydrobenzol). Sd. 108°<sub>760</sub> (C. r. 138, 1323 C. 1904 [2] 219; C. r. 139, 344 C. 1904 [2] 704).
- C<sub>7</sub>H<sub>14</sub> \*8) Suberan. Sd. 117—117,3°<sub>760</sub> (C. 1903 [1] 568; A. 327, 63 C. 1903 [1] 1124).
- \*9) Methylhexahydrobenzol (C. 1904 [1] 1345).
- C<sub>7</sub>H<sub>16</sub> 8) d-γ-Methylhexan. Sd. 90—92° (B. 37, 1046 C. 1904 [1] 1248).

## — 7 II —

- C<sub>7</sub>H<sub>5</sub>Br<sub>6</sub> \*1) 2,3,4,5,6-Pentabrom-1-Methylbenzol. Sm. 182° (C. 1903 [2] 1052).
- C<sub>7</sub>H<sub>4</sub>O<sub>4</sub> C 55,5 — H 2,6 — O 42,1 — M. G. 152.
- 1) 1,2-Carbonat d. 1,2,3-Trioxymethylbenzol. (3-Oxy-1,2-Phenylener d. Kohlensäure). Sm. 132—133° (B. 37, 106 C. 1904 [1] 584).
- C<sub>7</sub>H<sub>4</sub>O<sub>6</sub> \*1) 1,4-Pyron-2,6-Dicarbonsäure. Sm. 262°. Na (B. 37, 3744 C. 1904 [2] 1538).
- C<sub>7</sub>H<sub>4</sub>Cl<sub>4</sub> \*8) 4-Chlor-1-Trichlormethylbenzol (C. r. 136, 241 C. 1903 [1] 570).
- \*9) 3,4,5-Trichlor-1-Chlormethylbenzol. Sm. 97—98° (Soc. 85, 1285 C. 1904 [2] 1293).
- 10) 2,3,4,5-Tetrachlor-1-Methylbenzol. Sm. 86—88° (Soc. 85, 1280 C. 1904 [2] 1293).
- 11) 2,3,4,6-Tetrachlor-1-Methylbenzol. Sm. 91,5—92° (Soc. 85, 1280 C. 1904 [2] 1293).
- 12) 2,3,5,6-Tetrachlor-1-Methylbenzol. Sm. 93—94° (Soc. 85, 1281 C. 1904 [2] 1293).
- C<sub>7</sub>H<sub>5</sub>N \*2) Nitril d. Benzolcarbonsäure. Sd. 190,6°<sub>760</sub> (B. 36, 13 C. 1903 [1] 398).
- 5) Anhydro-3-Amidobenzol-1-Carbonsäurealdehyd (D.R.P. 62950). — \*III, 12.
- C<sub>7</sub>H<sub>5</sub>Cl 1) Verbindung (aus 4-Chlor-1-Chlormethylbenzol) = (C<sub>7</sub>H<sub>5</sub>Cl)<sub>n</sub> (R. 23, 100 C. 1904 [1] 1136).
- C<sub>7</sub>H<sub>5</sub>Cl<sub>3</sub> \*1) Benzotrichlorid (B. 36, 3060 C. 1903 [2] 945; C. r. 136, 241 C. 1903 [1] 570; C. 1903 [2] 1431).
- C<sub>7</sub>H<sub>5</sub>Br 1) Verbindung (aus 4-Brom-1-Chlormethylbenzol) = (C<sub>7</sub>H<sub>5</sub>Br)<sub>n</sub> (R. 23, 100 C. 1904 [1] 1136).
- C<sub>7</sub>H<sub>5</sub>O \*1) Aldehyd d. Benzolcarbonsäure. + Anilinsulfit, + Anilinbisulfit, + Anilinanhydrosulfit (A. 325, 357 C. 1903 [1] 696).
- C<sub>7</sub>H<sub>5</sub>O<sub>2</sub> \*4) Benzolcarbonsäure. (NH<sub>4</sub>)H, KH (D. R. P. 138790 C. 1903 [1] 546; C. 1903 [2] 657; D. R. P. 139956 C. 1903 [1] 857; D. R. P. 140999 C. 1903 [1] 1106; B. 36, 1798 C. 1903 [2] 283; Soc. 83, 1442 C. 1904 [1] 510).
- \*5) Aldehyd d. 2-Oxybenzol-1-Carbonsäure. Sm. 195—196°. + Anilinsulfit, + Anilinbisulfit, + Anilinanhydrosulfit (A. 325, 359 C. 1903 [1] 696; M. 24, 833 C. 1904 [1] 367; C. 1904 [2] 436).
- \*6) Aldehyd d. 3-Oxybenzol-1-Carbonsäure (M. 24, 834 C. 1904 [1] 367).
- \*7) Aldehyd d. 4-Oxybenzol-1-Carbonsäure (M. 24, 835 C. 1904 [1] 367).
- 11) Verbindung (aus p-Kresol). Sm. 120°; Zers. bei 180° (B. 36, 2032 C. 1903 [2] 360).
- C<sub>7</sub>H<sub>5</sub>O<sub>3</sub> \*2) Salicylsäure. KH (C. 1903 [1] 1026; G. 32 [2] 311 C. 1903 [1] 579; Soc. 83, 1444 C. 1904 [1] 510).
- \*4) 4-Oxybenzol-1-Carbonsäure. (NH<sub>4</sub>)H, KH, Bi (Bl. [3] 31, 36 C. 1904 [1] 510; Soc. 83, 1445 C. 1904 [1] 510).
- \*8) Aldehyd d. 2,4-Dioxybenzol-1-Carbonsäure. Sd. 220—228°<sub>22</sub> (D. R. P. 155731 C. 1904 [2] 1031).

- $C_7H_6O_3$  \*10) Aldehyd d. 3,4-Dioxybenzol-1-Carbonsäure (*M.* 24, 836 *C.* 1904 [1] 367; *D.R.P.* 155731 *C.* 1904 [2] 1631).  
 \*13) Benzoylsuperoxyd (Benzopersäure) (*Am.* 29, 200 *C.* 1903 [1] 959).  
 \*15) Isosalicylsäure (*C.* 1903 [1] 80).  
 16) Aldehyd d. 2,3-Dioxybenzol-1-Carbonsäure. *Sd.* 160—170<sub>22</sub> (*D.R.P.* 155731 *C.* 1904 [2] 1631).
- $C_7H_6O_4$  \*4) 2,4-Dioxybenzol-1-Carbonsäure. *Bi (Bl. [3] 31, 37 C. 1904 [1] 510).*  
 \*5) 2,5-Dioxybenzol-1-Carbonsäure. *Bi (Bl. [3] 31, 37 C. 1904 [1] 510).*  
 \*7) 3,4-Dioxybenzol-1-Carbonsäure. *Bi (Bl. [3] 31, 176 C. 1904 [1] 869).*  
 18) 2-Methyläther d. 2,6-Dioxy-1,4-Benzochinon (*M.* 23, 954 *C.* 1903 [1] 286).
- $C_7H_6O_5$  \*2) Pyrogallolcarbonsäure. *Bi (Bl. [3] 29, 680 C. 1903 [2] 492).*  
 7)  $\gamma$ -Keto- $\alpha\delta$ -Pentadien- $\alpha$ -s-Dicarbonsäure. *Sm. oberh. 230° u. Zers. (B. 37, 3297 C. 1904 [2] 1041).*  
 8) 1,4-Pyran-2,6-Dicarbonsäure. *Zers. bei 250° (C. r. 139, 138 C. 1904 [2] 602).*
- $C_7H_6N_2$  \*4) Nitril d. 2-Amidobenzol-1-Carbonsäure. *Sm. 48—49°; Sd. 267—268°<sub>777</sub> (C. 1903 [1] 174; B. 36, 804 C. 1903 [1] 977).*  
 \*5) Nitril d. 3-Amidobenzol-1-Carbonsäure. *Sm. 53—53,5°. HCl (C. 1904 [2] 101).*  
 \*6) Nitril d. 4-Amidobenzol-1-Carbonsäure. *Sm. 85,5—86° (C. 1903 [2] 113).*
- $C_7H_6N_4$  5) Nitril d. Phenylazoamidoameisensäure (1-Phenyl-2-Cyantriazin). *Sm. 72° u. Zers. K + H<sub>2</sub>O (B. 37, 2376 C. 1904 [2] 321).*
- $C_7H_6Cl_2$  \*1) Dichlormethylbenzol. *Sd. 205—206° (C. r. 136, 241 C. 1903 [1] 570; B. 36, 3060 C. 1903 [2] 945; C. 1903 [2] 1431).*  
 \*2) 4-Chlor-1-Chlormethylbenzol. *Sm. 29°; Sd. 214° (C. r. 136, 241 C. 1903 [1] 570).*  
 9) 2-Chlor-1-Chlormethylbenzol. *Sd. 213—214° (C. r. 136, 241 C. 1903 [1] 570).*
- $C_7H_7N$  \*1) Benzylidenimin (*C. r. 137, 522 C. 1903 [2] 1060).*  
 9) polym. Methylenamidobenzol (*C. 1903 [2] 656).*
- $C_7H_7N_3$  \*2) 6-Amidoindazol. (2HCl, PtCl<sub>4</sub>), + 1,3,5-Trinitrobenzol (*B. 37, 2580 C. 1904 [2] 659).*  
 8) 7-Amidoindazol. *Sm. 155—156° (B. 37, 2577 C. 1904 [2] 658).*  
 9) Nitril d. Phenylhydrazin-2-Carbonsäure. *Sm. 152—153° (156°). HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 29, 626; B. 36, 805 C. 1903 [1] 977). — IV, 1149.*
- $C_7H_7Cl$  \*1) Chlormethylbenzol (*D.R.P. 139552 C. 1903 [1] 607; B. 36, 3060 C. 1903 [2] 945; C. 1903 [2] 1431).*  
 \*2) 2-Chlor-1-Methylbenzol. *Sd. 156—158° (C. r. 135, 1121 C. 1903 [1] 283).*
- $C_7H_7Br$  \*3) 3-Brom-1-Methylbenzol (*B. 37, 994 C. 1904 [1] 1415).*
- $C_7H_8O$  \*3) 3-Oxy-1-Methylbenzol (*D.R.P. 141421 C. 1903 [1] 1197; D.R.P. 148703 C. 1904 [1] 553; D.R.P. 152652 C. 1904 [2] 168).*  
 \*4) 4-Oxy-1-Methylbenzol. + H<sub>3</sub>PO<sub>4</sub> (*D.R.P. 141421 C. 1903 [1] 1197 R. 21, 355 C. 1903 [1] 151; D.R.P. 148703 C. 1904 [1] 553).*  
 \*5) Methyläther d. Oxybenzol. + AlCl<sub>3</sub> (*Ar. 242, 96 C. 1904 [1] 1005 Soc. 85, 1107 C. 1904 [2] 976).*
- $C_7H_8O_2$  \*4) 2,6-Dioxy-1-Methylbenzol. *Sm. 116—121°; Sd. 264°<sub>780</sub> (M. 24, 906 C. 1904 [1] 513).*  
 \*11) Guajakol (*C. 1903 [1] 635).*  
 \*12) Monomethyläther d. 1,3-Dioxybenzol. *Sd. 243° (A. 327, 116 C. 1903 [1] 1214).*  
 \*13) Monomethyläther d. 1,4-Dioxybenzol. *Sm. 53° (A. 327, 116 C. 1903 [1] 1214).*  
 19) 1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol (p-Toluchinol). *Sm. 74—75° (B. 36, 2031 C. 1903 [2] 360).*  
 20)  $\delta$ -Methyl- $\alpha$ -Pentin- $\alpha$ -Carbonsäure. *Sm. 98° (C. r. 136, 554 C. 1903 [1] 825).*
- $C_7H_8O_3$  \*2) 2,4,6-Trioxy-1-Methylbenzol. *Sm. 214° (A. 329, 272 C. 1904 [1] 795).*  
 \*8) 2,5-Dimethylfuran-3-Carbonsäure. *Sm. 135—135,5° (B. 37, 2189 C. 1904 [2] 240).*  
 \*30) 1-Methyläther d. 1,2,4-Trioxybenzol. *Sm. 66—67° (M. 25, 810 C. 1904 [2] 1119).*  
 \*31) Monomethyläther d. 1,3,5-Trioxybenzol. *Sm. 80° (A. 329, 273 C. 1904 [1] 795).*

7 II.

- $C_7H_8O_8$  36) 1-Methyläther d. 1,2,3-Trioxymethylbenzol. Sm. 37—40°; Sd. 146—147°<sub>16</sub> (M. 25, 506 C. 1904 [2] 1118; M. 25, 813 C. 1904 [2] 1119).
- 37) 2-Methyläther d. 1,2,3-Trioxymethylbenzol. Sm. 85—87°; Sd. 154—155°<sub>24</sub> (M. 25, 815 C. 1904 [2] 1119).
- 38) Anhydrid d.  $\gamma$ -Methyl- $\alpha$ -Buten- $\beta\gamma$ -Dicarbonsäure. Sd. 210—215° (Soc. 83, 1388 C. 1904 [1] 435).
- 39) Aethylester d. Isobrenzschleimsäure. Sm. 52° (C. r. 137, 992 C. 1904 [1] 291).
- $C_7H_8O_4$  \*13) Isoterebilsäure. Ca + H<sub>2</sub>O, Ba + 2H<sub>2</sub>O (A. 330, 321 Anm. C. 1904 [1] 928).
- \*14) Isoheptodilakton (A. 330, 316 C. 1904 [1] 927; A. 331, 106 C. 1904 [1] 931).
- $C_7H_8O_6$  7) Anhydrid d.  $\beta$ -Acetoxylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 87—88° (Bl. [3] 29, 1014 C. 1903 [2] 1315).
- 8)  $\alpha\gamma$ -Lakton d.  $\beta\gamma$ -Dioxypropen- $\alpha\alpha$ -Dicarbonsäuremonoäthylester + xH<sub>2</sub>O (Tetron- $\alpha$ -Carbonsäureäthylester). Sm. 75—77° (124—125° wasserfrei) (B. 36, 470 C. 1903 [1] 627).
- $C_7H_8O_6$  13)  $\alpha\epsilon$ -Diketopentan- $\alpha\epsilon$ -Dicarbonsäure. Sm. 127° (C. r. 139, 138 C. 1904 [2] 602).
- 14) 1-Methyl-R-Trimethylen-2,2,3-Tricarbonsäure. Zers. bei 215° (185°?). Ca<sub>3</sub>, Ba<sub>3</sub> + 8H<sub>2</sub>O, Ag<sub>3</sub> (B. 17, 2833; B. 36, 1086 C. 1903 [1] 1126).
- 15)  $\alpha\beta$ [oder  $\alpha\gamma$ ]-Anhydrid d.  $\beta$ -Oxypropanmethyläther- $\alpha\beta\gamma$ -Tricarbonsäure (Methylcitronenanhydridsäure). Sm. 131° (B. 37, 3970 C. 1904 [2] 1605).
- $C_7H_8O_7$  \*3) Methylencitronensäure. Na<sub>2</sub> (C. 1903 [2] 1344; D.R.P. 150949 C. 1904 [1] 1379).
- $C_7H_8O_8$  \*2) Propan- $\alpha\beta\beta\gamma$ -Tetracarbonsäure. Sm. 151° (J. pr. [2] 68, 165 C. 1903 [2] 760).
- $C_7H_8Se$  1) Methyläther d. Selenobenzol. Sd. 200—201° (Soc. 81, 1553 C. 1903 [1] 22, 144).
- $C_7H_8O_8$  1) Aucubigenin (C. r. 138, 1114 C. 1904 [1] 1652).
- $C_7H_8N$  \*2) Benzylamin. Phosphorigsaures Salz (A. 326, 151 C. 1903 [1] 760).
- \*3) 2-Amido-1-Methylbenzol (A. 327, 108 C. 1903 [1] 1213).
- \*5) 4-Amido-1-Methylbenzol (A. 327, 108 C. 1903 [1] 1213).
- \*10) 2,4-Dimethylpyridin. HCl, (HCl, AuCl<sub>3</sub>), HBr (B. 37, 2065 C. 1904 [2] 123).
- \*11) 2,5-Dimethylpyridin. Sd. 159—160°. (HCl, 6HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), Pikrat (C. 1903 [1] 1034; B. 37, 2062 C. 1904 [2] 123).
- \*12) 2,6-Dimethylpyridin. (HCl, HgCl<sub>2</sub>), (HCl, AuCl<sub>3</sub>) (B. 36, 2907 C. 1903 [2] 889).
- \*14) 3,5-Dimethylpyridin. Sd. 171°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (C. 1903 [1] 1034; B. 37, 2064 C. 1904 [2] 123).
- 17) 2,3-Dimethylpyridin. Sd. 163—164°<sub>768</sub>. (HCl, 2HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (Soc. 83, 764 C. 1903 [2] 443).
- $C_7H_8N_8$  \*1) Phenylguanidin. Sd. 50—60°. HNO<sub>3</sub>, Pikrat (B. 37, 1682 C. 1904 [1] 1491).
- 4) Diazobenzolmethylamid. Sm. 37—37,5° (B. 36, 911 C. 1903 [1] 974).
- $C_7H_{10}O$  \*2) 1-Keto-5-Methyl-1,2,3,4-Tetrahydrobenzol (B. 37, 1672 C. 1904 [1] 1606).
- \*9) 4-Keto-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sd. 178—181° (C. 1903 [1] 329; A. 329, 374 C. 1904 [1] 517).
- $C_7H_{10}O_2$  \*7)  $\alpha$ -Hexin- $\alpha$ -Carbonsäure. Sd. 140—142°<sub>24</sub> (C. r. 136, 553 C. 1903 [1] 824).
- \*15)  $\beta\delta$ -Hexadien- $\beta$ -Carbonsäure. Sm. 90—92°. Cu, Ag (C. 1903 [2] 556).
- 19) 2-Keto-1-Oxymethylenhexahydrobenzol. Sd. 98—100°<sub>55</sub> (A. 329, 117 C. 1903 [2] 1322).
- 20) 3-Keto-4-Oxymethylen-1-Methyl-R-Pentamethylen. Sm. 53—54°; Sd. 105—112°<sub>22</sub> (A. 329, 116 C. 1903 [2] 1322).
- 21)  $\gamma\gamma$ -Dimethyl- $\alpha$ -Butin- $\alpha$ -Carbonsäure. Sm. 47—48°; Sd. 110°<sub>10</sub>. Ba (C. r. 136, 553 C. 1903 [1] 824; Bl. [3] 29, 654 C. 1903 [2] 487).
- 22) 1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sm. 13°; Sd. 237°<sub>748</sub> (Soc. 85, 431 C. 1904 [1] 1082, 1439).
- 23) Lakton d.  $\gamma$ -Methyl- $\gamma$ -Oxymethyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 177° (M. 25, 13 C. 1904 [1] 718).

- $C_7H_{10}O_2$  24) Methylester d.  $\alpha$ -Pentin- $\alpha$ -Carbonsäure. Sd.  $80-82^\circ_{28}$  (*C. r.* 136, 553 *C.* 1903 [1] 824).
- 25) Methylester d.  $\gamma$ -Methyl- $\alpha$ -Butin- $\alpha$ -Carbonsäure. Sd.  $68-69^\circ_{20}$  (*C. r.* 136, 553 *C.* 1903 [1] 824).
- $C_7H_{10}O_3$  \*1) s-Diacetylacetone.  $Na_2 + H_2O$  (*Soc.* 85, 976 *C.* 1904 [2] 711).
- \*19) Anhydrid d. cis- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sd.  $273-276^\circ$  ( $255^\circ_{765}$ ) (*C. r.* 136, 243 *C.* 1903 [1] 565; *Soc.* 83, 357 *C.* 1903 [1] 389, 1122).
- \*20) Anhydrid d.  $\beta$ -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm.  $33^\circ$  (*Soc.* 85, 551 *C.* 1904 [1] 1485).
- 37) 4-Ketohexahydrobenzol-1-Carbonsäure +  $H_2O$ . Sm.  $68^\circ$ ; Sd.  $210^\circ_{30}$  (*Soc.* 85, 424 *C.* 1904 [1] 1082, 1439).
- 38) Anhydrid d. 1- $\beta$ -Methylbutan- $\gamma\delta$ -Dicarbonsäure. Sd.  $138-140^\circ_{19}$  (*B.* 36, 1751 *C.* 1903 [2] 116).
- $C_7H_{10}O_4$  \*10)  $\alpha$ -Penten- $\alpha\beta$ -Dicarbonsäure (*A.* 331, 127 *C.* 1904 [1] 932).
- \*16) trans- $\beta$ -Penten- $\beta\delta$ -Dicarbonsäure. Sm.  $147^\circ$  (*C. r.* 136, 692 *C.* 1903 [1] 960; *Bl.* [3] 29, 1020 *C.* 1903 [2] 1315).
- \*18)  $\beta$ -Methyl- $\alpha$ -Buten- $\gamma\delta$ -Dicarbonsäure (*A.* 331, 104 *C.* 1904 [1] 931).
- \*21) Terakonsäure. Sm.  $164^\circ$  u. Zers. (*B.* 35, 4322 *C.* 1903 [1] 282; *B.* 36, 197 *C.* 1903 [1] 443; *A.* 331, 97 *C.* 1904 [1] 931).
- \*37) Isoterebinsäure.  $Ca + 2H_2O$  (*A.* 330, 321 Anm. *C.* 1904 [1] 928).
- \*61) trans- $\gamma$ -Methyl- $\alpha$ -Buten- $\alpha\gamma$ -Dicarbonsäure. Sm.  $163^\circ$  ( $172^\circ$ ) (*C. r.* 136, 692 *C.* 1903 [1] 960; *Soc.* 83, 17 *C.* 1903 [1] 76, 443; *Bl.* [3] 29, 1019 *C.* 1903 [2] 1315).
- \*62) cis- $\gamma$ -Methyl- $\alpha$ -Buten- $\alpha\gamma$ -Dicarbonsäure. Sm.  $134-135^\circ$  (*C. r.* 136, 382 *C.* 1903 [1] 697; *C. r.* 136, 692 *C.* 1903 [1] 960).
- \*69)  $\alpha\gamma$ -Diketohexan- $\alpha$ -Carbonsäure. Na (*Soc.* 81, 1490 *C.* 1903 [1] 138).
- \*70)  $\gamma\delta$ -Diketo- $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. K (*Soc.* 81, 1488 *C.* 1903 [1] 138).
- \*73)  $\gamma$ -Methyl- $\alpha$ -Buten- $\beta\gamma$ -Dicarbonsäure. Sm.  $142^\circ$ .  $Ag_2$  (*Soc.* 83, 1388 *C.* 1904 [1] 159, 435).
- 79)  $\beta$ -Penten- $\gamma\delta$ -Dicarbonsäure ( $\alpha\gamma$ -Dimethylitakonsäure). Sm.  $148-150^\circ$  u. Zers. (*B.* 37, 1618 *C.* 1904 [1] 1403).
- 80) isom.  $\beta$ -Penten- $\beta\gamma$ -Dicarbonsäure (Methyläthylfumarsäure?). Sm.  $202^\circ$ . Ca, Ba (*B.* 37, 1618 *C.* 1904 [1] 1403).
- 81) cis- $\gamma$ -Methyl- $\alpha$ -Buten- $\alpha\gamma$ -Dicarbonsäure. Sm.  $135-137^\circ$  (*Soc.* 83, 15 *C.* 1903 [1] 76, 443).
- 82) Säure (aus Pilopinsäure). Sm.  $190^\circ$ .  $Ag_2$  (*Soc.* 79, 1342). — \*III, 688.
- 83)  $\beta\delta$ -Lakton d.  $\delta$ -Oxypentan- $\beta\gamma$ -Dicarbonsäure. Sm.  $131^\circ$ ; Sd.  $195^\circ_{14}$ . Ag (*B.* 37, 1615 *C.* 1904 [1] 1403).
- $C_7H_{10}O_5$  \*13) Oxysoterebinsäure.  $Ca + H_2O$ , Ba +  $2H_2O$  (*A.* 330, 315 *C.* 1904 [1] 927; *A.* 330, 321 *C.* 1904 [1] 928).
- 31) Formalmethylenarabinsid. Sd.  $155^\circ_{32}$  (*R.* 22, 162 *C.* 1903 [2] 108).
- 32) Formalmethylenxylosid. Sm.  $56-57^\circ$  (*R.* 22, 161 *C.* 1903 [2] 108).
- 33) Oxylaktonsäure (aus Isoheptodilakton). Ba (*A.* 330, 322 *C.* 1904 [1] 928).
- $C_7H_{10}O_6$  \*8) Butan- $\alpha\beta\delta$ -Tricarbonsäure. Sm.  $122^\circ$  (*C.* 1903 [1] 628; *Soc.* 85, 612 *C.* 1904 [1] 1254, 1553).
- $C_7H_{10}O_7$  10)  $\beta$ -Oxypropanmethyläther- $\alpha\beta\gamma$ -Tricarbonsäure +  $H_2O$  (Methylocitronensäure). Sm.  $98-99^\circ$  ( $130-131^\circ$  wasserfrei).  $Ag_3$  (*A.* 327, 230 *C.* 1903 [1] 1406).
- $C_7H_{10}O_8$  4) Monoformalschleimsäure +  $H_2O$ . Sm.  $175^\circ$  ( $192^\circ$ ) (*R.* 21, 320 *C.* 1903 [1] 138).
- $C_7H_{10}N_2$  26) 2- $[\beta$ -Amidoäthyl]pyridin. Sd.  $92-93^\circ_{12}$ . ( $2HCl$ ,  $PtCl_4 + 2H_2O$ ),  $HBr$  (*B.* 37, 171 *C.* 1904 [1] 673).
- 27) Pyrazol (aus 2-Semicarbazol-1-Oxymethylenhexahydrobenzol). Sm.  $84^\circ$ .  $HCl$ , ( $2HCl$ ,  $PtCl_4$ ), ( $HCl$ ,  $AnCl_3$ ) (*A.* 329, 118 *C.* 1903 [2] 1322).
- 28) Pyrazol (aus 3-Semicarbazol-4-Oxymethylen-1-Methyl-R-Pentamethylen. Fl. ( $2HCl$ ,  $PtCl_4$ ) (*A.* 329, 117 *C.* 1903 [2] 1322).
- 29) 4-Methyl-5-Aethyl-1,3-Diazin. Sd.  $193,5^\circ_{768}$ .  $HCl$ , +  $2HgCl_2$ , +  $2PtCl_4$ , +  $AnCl_3$  (*B.* 36, 1917 *C.* 1903 [2] 208).
- 30) Nitril d. Pentan- $\alpha\epsilon$ -Dicarbonsäure. Sd.  $171-172^\circ_{12}$  (*B.* 37, 3590 *C.* 1904 [2] 1407).
- $C_7H_{11}N$  13) Nitril d. Hexahydrobenzolcarbonsäure. Sd.  $185-185,5^\circ_{728}$ .  $HCl$ , ( $2HCl$ ,  $PtCl_4$ ), ( $HCl$ ,  $AnCl_3$ ) (*C.* 1904 [1] 1214).

- C<sub>7</sub>H<sub>11</sub>N<sub>3</sub>** \*5) 4-Hydrazido-2,6-Dimethylpyridin. HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat (*B.* 36, 1116 *C.* 1903 [1] 1185).
- 7) 2-Amido-4-Methyl-5-Aethyl-1,3-Diazin. Sm. 168—169°; Sd. 250°<sub>704</sub> (*B.* 36, 1919 *C.* 1903 [2] 208).
- C<sub>7</sub>H<sub>12</sub>O** \*1) δ-Oxy-α-ζ-Heptadien (*C.* 1903 [2] 1415).
- \*9) 2-Keto-1-Methylhexahydrobenzol. Sm. 165° (*A.* 329, 376 *C.* 1904 [1] 517).
- 21) 1-Methylhexahydrobenzol-3,4-Oxyd. Sd. 146°<sub>735</sub> (*C.* 1903 [2] 289; 1904 [1] 1346).
- 22) Aldehyd d. Hexahydrobenzolcarbonsäure. Sd. 159° (*Bl.* [3] 29, 1050 *C.* 1903 [2] 1437; *C. r.* 137, 989 *C.* 1904 [1] 257; *C. r.* 139, 344 *C.* 1904 [2] 704).
- C<sub>7</sub>H<sub>12</sub>O<sub>2</sub>** \*2) βδ-Diketoheptan (Butyrylacetone). Sd. 69—70°<sub>20</sub>. Na, Cu (*Bl.* [3] 27, 1085 *C.* 1903 [1] 225).
- \*21) Hexahydrobenzolcarbonsäure (*C.* 1903 [1] 1134).
- \*30) Lakton d. γ-Oxyhexan-α-Carbonsäure. Sd. 222—234°<sub>742</sub> (*B.* 35, 4272 *C.* 1903 [1] 281).
- \*33) Lakton d. δ-Oxy-β-Methylpentan-β-Carbonsäure. Sm. 52° (*Soc.* 85, 158 *C.* 1904 [1] 720).
- \*53) γδ-Diketoheptan. Sd. 145—146° (*Bl.* [3] 31, 1174 *C.* 1904 [2] 1701).
- 69) α-Hexen-α-Carbonsäure. Sd. 225—228°<sub>737</sub>. Ca (*B.* 35, 4268 *C.* 1903 [1] 281).
- 70) δ-Methyl-β-Penten-δ-Carbonsäure. Sd. 213° (*Soc.* 85, 158 *C.* 1904 [1] 720).
- 71) Säure (aus Naphta). Sd. 121—122°<sub>14</sub> (*D.R.P.* 151880 *C.* 1904 [2] 70).
- 72) Lakton (aus β-Methylbutan-βδ-Dicarbonsäurediäthylester). Sd. 105°<sub>18</sub>. Ba + 1½H<sub>2</sub>O (*C. r.* 138, 580 *C.* 1904 [1] 925).
- 73) Acetat d. 1-Oxymethyl-R-Tetramethylen. Sd. 150—151°<sub>736</sub> (*C.* 1903 [1] 828).
- C<sub>7</sub>H<sub>12</sub>O<sub>3</sub>** \*13) β-Ketohexan-ζ-Carbonsäure. Sm. 50° (*A.* 329, 377 *C.* 1904 [1] 517).
- \*14) δ-Keto-β-Methylpentan-β-Carbonsäure. Sm. 75,5—76,5° (*A.* 329, 99 *C.* 1903 [2] 1071; *Soc.* 85, 1219 *C.* 1904 [2] 1108).
- \*27) Methylester d. γ-Keto-β-Methylbutan-β-Carbonsäure. Sd. 174—174,2° (*Soc.* 83, 1231 *C.* 1903 [2] 1420).
- \*39) δ-Oxy-β-Hexen-ε-Carbonsäure. Fl. K + 1½H<sub>2</sub>O, Ba + 3½H<sub>2</sub>O (*C.* 1903 [2] 556).
- \*45) Methylester d. β-Ketopentan-α-Carbonsäure. Sd. 86°<sub>14</sub> (*Bl.* [3] 27, 1089 *C.* 1903 [1] 226).
- 49) γ-Methyl-γ-Oxymethyl-α-Buten-α-Carbonsäure. Ba (*M.* 25, 14 *C.* 1904 [1] 718).
- 50) trans-4-Oxyhexahydrobenzol-1-Carbonsäure. Sm. 121° (*Soc.* 85, 430 *C.* 1904 [1] 1082, 1439).
- 51) γ-Ketohexan-α-Carbonsäure (β-Butyrylpropionsäure). Sm. 46—47° (*Bl.* [3] 27, 1093 *C.* 1903 [1] 226).
- 52) ε-Keto-β-Methylpentan-ε-Carbonsäure. Sm. 22°; Sd. 101—102°<sub>12</sub> (*Bl.* [3] 31, 1152 *C.* 1904 [2] 1707).
- 53) α-Keto-ββ-Dimethylbutan-α-Carbonsäure (Dimethyläthylbrenztraubensäure). Sd. 86°<sub>15</sub>. Ca + H<sub>2</sub>O (*A.* 327, 209 *C.* 1903 [1] 1407).
- 54) Aethylester d. α-Ketobutan-α-Carbonsäure (Ac. d. Butyrylameisensäure). Sd. 179—180° (*B.* 37, 2386 *Anm.* *C.* 1904 [2] 307; *Bl.* [3] 31, 1149 *C.* 1904 [2] 1706).
- 55) Monoäthylester d. Propan-ββ-Dicarbonsäuremonaldehyd. Sd. 163 bis 164°<sub>743</sub> (*Bl.* [3] 31, 161 *C.* 1904 [1] 869).
- 56) Butyrat d. α-Oxy-β-Ketopropan. Sd. 106—107°<sub>27</sub> (*C. r.* 138, 1275 *C.* 1904 [2] 93).
- C<sub>7</sub>H<sub>12</sub>O<sub>4</sub>** \*8) Pentan-αδ-Dicarbonsäure. Sm. 57,5—61,5° (*C.* 1903 [2] 23, 289).
- \*9) Pentan-αε-Dicarbonsäure. Sm. 103—104° (*B.* 37, 3591 *C.* 1904 [2] 1407).
- \*13) trans-Pentan-βδ-Dicarbonsäure. Sm. 140—141° (*Soc.* 83, 359 *C.* 1903 [1] 1122).
- \*14) cis-Pentan-βδ-Dicarbonsäure. Sm. 126—127° (128°) (*C. r.* 136, 382 *C.* 1903 [1] 697; *Soc.* 83, 358 *C.* 1903 [1] 1122; *Bl.* [3] 29, 1018 *C.* 1903 [2] 1315).
- \*19) trans-β-Methylbutan-αγ-Dicarbonsäure. Fl. (*Soc.* 83, 357 *C.* 1903 [1] 389, 1122).

- C<sub>7</sub>H<sub>12</sub>O<sub>4</sub>** \*20) *cis*- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 84–85° (82–83°; 87°) (*Bl.* [3] 29, 333 *C.* 1903 [1] 1216; *C. r.* 136, 243 *C.* 1903 [1] 565; *Soc.* 83, 357 *C.* 1903 [1] 389, 1122).
- \*21)  $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 89,2° (*C.* 1903 [2] 288, 289, 1425).
- \*23)  $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm. 90° (82°) (*Soc.* 83, 13 *C.* 1903 [1] 76, 443; *C. r.* 136, 1463 *C.* 1903 [2] 282; *A.* 329, 97 *C.* 1903 [2] 1071; *C. r.* 138, 580 *C.* 1904 [1] 925).
- \*34) Dimethylester d. Propan- $\alpha\beta$ -Dicarbonsäure. Sd. 197–198° (*Soc.* 85, 543 *C.* 1904 [1] 1485).
- \*42) Diäthylester d. Malonsäure. + AlCl<sub>3</sub> (*B.* 36, 268 *C.* 1903 [1] 440; *B.* 36, 1333 *C.* 1903 [1] 1301; *Soc.* 85, 1108 *C.* 1904 [2] 976).
- 57)  $\alpha$ -Acetoxyl- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 56°. Ca (*Bl.* [3] 31, 125 *C.* 1904 [1] 644).
- 58) Monomethylester d. *cis*-Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 38°. Ag (*Soc.* 85, 545 *C.* 1904 [1] 1484).
- 59) Monomethylester d. *trans*-Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 49°. Ag (*Soc.* 85, 546 *C.* 1904 [1] 1484).
- 60)  $\alpha$ -Methylester d.  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 52°. Ag (*Soc.* 85, 547 *C.* 1904 [1] 1485).
- 61)  $\beta$ -Methylester d.  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 40,5–41°; Sd. 141°. Ag (*Soc.* 85, 548 *C.* 1904 [1] 1485).
- C<sub>7</sub>H<sub>12</sub>O<sub>5</sub>** 40)  $\gamma$ -Oxy- $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm. 158–160° (*Soc.* 83, 14 *C.* 1903 [1] 76, 443).
- 41) Oxsäure (aus Pilopinsäure). Ba, Ag<sub>2</sub> (*Soc.* 79, 1337 *C.* 1902 [1] 50). — \*III, 688.
- C<sub>7</sub>H<sub>12</sub>O<sub>6</sub>** \*2) d-Chinasäure (*Ph. Ch.* 44, 467 *C.* 1903 [2] 570).
- \*3)  $\gamma\delta$ -Dioxy-pentan- $\alpha\beta$ -Dicarbonsäure. Ba + 3½ H<sub>2</sub>O (*A.* 330, 318 *C.* 1904 [1] 925).
- \*11) Diäthylester d. Dioxymethandicarbonsäure. Sm. 57° (*C. r.* 137, 197 *C.* 1903 [2] 659; *B.* 37, 1782 *C.* 1904 [1] 1483).
- 16) Methylengalaktosid. Sm. 203° (*R.* 22, 163 *C.* 1903 [2] 108).
- 17) Methylmannosid. Sm. 188° (*R.* 22, 164 *C.* 1903 [2] 109).
- 18) Monopropylester d. d-Weinsäure. K (*Soc.* 85, 1124 *C.* 1904 [2] 1206).
- C<sub>7</sub>H<sub>12</sub>O<sub>9</sub>** 6) isom. Pentaoxypimelinsäure. Ca (*B.* 35, 4020 *C.* 1903 [1] 391).
- C<sub>7</sub>H<sub>12</sub>N<sub>2</sub>** 10) 3-Methyl-5-Propylpyrazol (oder 5-Methyl-3-Propylpyrazol). Sd. 136 bis 137°<sub>20</sub> (*Bl.* [3] 27, 1087 *C.* 1903 [1] 226; *Bl.* [3] 27, 1099 *C.* 1903 [1] 227).
- 11) Nitril d. Hexahydropyridin-1-Methylcarbonsäure (N. d. Piperidyllessigsäure). Sm. 19°; Sd. 210° (*B.* 36, 4193 *C.* 1904 [1] 263; *C.* 1904 [2] 1378; *B.* 37, 4082 *C.* 1904 [2] 1723).
- C<sub>7</sub>H<sub>12</sub>N<sub>4</sub>** 2) 2,6-Diamido-4-Methyl-5-Aethyl-1,3-Diazin. Sm. 161–162°; Sd. 310° (2HCl, PtCl<sub>4</sub>) (*B.* 36, 1920 *C.* 1903 [2] 208).
- C<sub>7</sub>H<sub>12</sub>Br<sub>2</sub>** 6) 3,4-Dibrom-1-Methylhexahydrobenzol. Sd. 130°<sub>40</sub> (*C.* 1904 [1] 1213; 1904 [2] 220).
- C<sub>7</sub>H<sub>13</sub>Cl** \*7) 3-Chlor-1-Methylhexahydrobenzol. Sd. 63,5–65°<sub>40</sub> (*C.* 1904 [1] 1345).
- \*9) 1-Chlor-1-Methylhexahydrobenzol (*C.* 1904 [1] 1345).
- 12) 2-Chlor-1-Methylhexahydrobenzol. Sd. 65–67°<sub>40</sub> (*C.* 1904 [1] 1345).
- C<sub>7</sub>H<sub>13</sub>Br** \*1) 3-Brom-1-Methylhexahydrobenzol. Sd. 181°<sub>758</sub> (*C.* 1904 [1] 1345; *B.* 37, 851 *C.* 1904 [1] 1146).
- \*7) Brom-R-Heptamethylen. Sd. 101,5°<sub>40</sub> (*C.* 1903 [1] 567; *A.* 327, 63 *C.* 1903 [1] 1124).
- C<sub>7</sub>H<sub>13</sub>J** \*2) 3-Jod-1-Methylhexahydrobenzol. Sd. 205–206°<sub>734</sub> (1904 [1] 1346).
- C<sub>7</sub>H<sub>14</sub>O** \*1)  $\delta$ -Oxy- $\delta$ -Methyl- $\alpha$ -Hexen (*C.* 1903 [2] 1415).
- \*3) Oxy-R-Heptamethylen. Sd. 184–185°<sub>758</sub> (*C.* 1904 [1] 1214).
- \*4) 2-Oxy-Methylhexahydrobenzol. Sd. 168–170° (*A.* 329, 375 *C.* 1904 [1] 517; *C.* 1904 [1] 1346).
- \*8) 2-Oxy-1,3-Dimethyl-R-Pentamethylen (*C.* 1903 [2] 1415).
- \*12)  $\beta$ -Ketoheptan. Sd. 149–150° (*Bl.* [3] 29, 674 *C.* 1903 [2] 487).
- \*15)  $\delta$ -Keto- $\beta$ -Methylhexan (*C. r.* 137, 576 *C.* 1903 [2] 1110).
- \*17)  $\beta$ -Keto- $\gamma$ -Methylhexan. Sd. 146–147° (*C.* 1903 [1] 1023; *B.* 36, 2715 *C.* 1903 [2] 987).
- \*26) Oenanthol. + Anilinsulfit, + Anilinanhydrosulfit (*A.* 325, 356 *C.* 1903 [1] 696).
- \*29) 1-Oxy-1-Methylhexahydrobenzol. Sm. 12°; Sd. 155°<sub>780</sub> (*C. r.* 138, 1321 *C.* 1904 [2] 219).

- C<sub>7</sub>H<sub>14</sub>O** 35)  $\delta$ -Oxy- $\beta\delta$ -Dimethyl- $\beta$ -Penten. *Sd.* 46°<sub>14</sub> (*B.* 37, 3578 *C.* 1904 [2] 1376).  
 36) Oxymethylhexahydrobenzol. (Hexahydrobenzylalkohol). *Sd.* 82°<sub>11</sub> (181°<sub>755</sub>) (*C. r.* 137, 61 *C.* 1903 [2] 551; *C. r.* 139, 344 *C.* 1904 [2] 704).  
 37) Aldehyd d. Hexan- $\gamma$ -Carbonsäure. *Sd.* 141—143° (*C. r.* 138, 92 *C.* 1904 [1] 505).
- C<sub>7</sub>H<sub>14</sub>O<sub>2</sub>** 52) 3,4-Dioxy-1-Methylhexahydrobenzol. *Sd.* 134°<sub>18</sub> (*C.* 1904 [2] 220).  
 53) Monomethyläther d. isom. 1,2-Dioxyhexahydrobenzol. *Sd.* 184—185°<sub>702</sub> (*C. r.* 136, 384 *C.* 1903 [1] 711).  
 54) Aethyläther d.  $\alpha$ -Oxy- $\beta$ -Ketopentan. *Sd.* 164—165° (*C. r.* 138, 91 *C.* 1904 [1] 505).  
 55) Oxyd (aus d. Glycerin d. Methyläthylallylcarbinol). *Sd.* 201—203°<sub>755</sub> (*C.* 1904 [2] 185).  
 56)  $\beta\beta$ -Dimethylbutan- $\delta$ -Carbonsäure. *Sm.* -1 bis +3°; *Sd.* 211—214° (*C. r.* 136, 554 *C.* 1903 [1] 825; *Bl.* [3] 29, 664 *C.* 1903 [2] 487).  
 57) Säure (aus Naphta). *Sd.* 207—209° (*C.* 1903 [1] 1134).  
 58) Aldehyd d.  $\delta$ -Oxy- $\beta$ -Methylpentan- $\gamma$ -Carbonsäure. *Sd.* 100—110°<sub>26</sub> (*M.* 22, 4; *M.* 24, 245 *C.* 1903 [2] 237).  
 59) Methylester d. Pentan- $\gamma$ -Carbonsäure (*M.* d. Diäthyllessigsäure) (*C.* 1903 [1] 225).  
 60) Verbindung (aus d. Verb. C<sub>6</sub>H<sub>10</sub>O<sub>2</sub>). *Sd.* 160—170° (*C. r.* 137, 1205 *C.* 1904 [1] 356).
- C<sub>7</sub>H<sub>14</sub>O<sub>3</sub>** \*6)  $\gamma$ -Oxyhexan- $\alpha$ -Carbonsäure. *Ba.* (*B.* 35, 4272 *C.* 1903 [1] 281).  
 \*48) Aldehyd d.  $\alpha\gamma$ -Dioxy- $\beta\beta$ -Dimethylbutan- $\delta$ -Carbonsäure (*M.* 25, 1065 *C.* 1904 [2] 1599).  
 \*49) Aethylester d.  $\alpha$ -Oxy- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. *Sd.* 188°<sub>760</sub> (*Bl.* [3] 31, 113 *C.* 1904 [1] 643; *Bl.* [3] 31, 122 *C.* 1904 [1] 644).  
 52)  $\delta$ -Oxy- $\beta$ -Methylpentan- $\gamma$ -Carbonsäure. *Sd.* 250° (*M.* 24, 246 *C.* 1903 [2] 237).  
 53)  $\alpha$ -Oxy- $\beta$ -Methylpropanäthyläther- $\beta$ -Carbonsäure. *Sd.* 123°<sub>22</sub> (*Bl.* [3] 31, 127 *C.* 1904 [1] 644).  
 54) Aethylester d.  $\beta$ -Oxy- $\alpha$ -Methylbuttersäure. *Sd.* 98—100°<sub>80</sub> (*Bl.* [3] 29, 330 *C.* 1903 [1] 1226).  
 55) Butylester d. 1- $\alpha$ -Oxypropionsäure. *Sd.* 70,5—73°<sub>10-11</sub> (*C.* 1903 [2] 1419).  
 56) Isobutylester d. 1- $\alpha$ -Oxypropionsäure. *Sd.* 72—75°<sub>13</sub> (*C.* 1903 [2] 1419).  
 57) Monoacetat d.  $\alpha\beta$ -Dioxy- $\beta$ -Methylbutan. *Sd.* 145—147°<sub>10</sub> (*C. r.* 137, 758 *C.* 1903 [2] 1415).
- C<sub>7</sub>H<sub>14</sub>O<sub>4</sub>** \*9)  $\alpha$ -Butyrat d.  $\alpha\beta\gamma$ -Trioxypropan (*C.* 1903 [1] 133).  
 13)  $\alpha$ -Isobutyryl d.  $\alpha\beta\gamma$ -Trioxypropan. *Sd.* 264—266° (*C.* 1903 [1] 134).
- C<sub>7</sub>H<sub>14</sub>O<sub>5</sub>** \*6)  $\alpha$ -Methyl-d-Glykosid. *Sm.* 164—165° (*M.* 24, 358 *C.* 1903 [2] 488; *Soc.* 83, 1313 *C.* 1904 [1] 86).  
 \*7)  $\beta$ -Methyl-d-Glykosid (*Soc.* 83, 1312 *C.* 1904 [1] 86).  
 22) Methylchitosid + H<sub>2</sub>O. *Sm.* 169° (*B.* 35, 4021 *C.* 1903 [1] 391).
- C<sub>7</sub>H<sub>14</sub>O<sub>8</sub>** 9) Chitoheptonsäure. *Ba.* (*B.* 35, 4022 *C.* 1903 [1] 391).
- C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>** \*1) Nitril d. Dipropylamidoameisensäure. *Sd.* 97°<sub>17</sub> (*B.* 36, 1198 *C.* 1903 [1] 1215).  
 \*7)  $\alpha$ -Diäthylamidopropionsäure. *Sd.* 68°<sub>17</sub> (*B.* 37, 4089 *C.* 1904 [2] 1724).  
 8) polym.  $\alpha\omega$ -Di[Methylenamido]pentan. *Sm.* 251° (*B.* 36, 38 *C.* 1903 [1] 502).  
 9) Nitril d.  $\alpha$ -Propylamidobuttersäure. *Sd.* 176—177° (*C.* 1904 [2] 945).  
 10) Nitril d.  $\alpha$ -Isobutylamidopropionsäure. *Sd.* 168—169° (*C.* 1904 [2] 945).
- C<sub>7</sub>H<sub>15</sub>N** \*7) 3-Amido-1-Methylhexahydrobenzol. *Sd.* 150° (*C. r.* 138, 1258 *C.* 1904 [2] 105).  
 \*13) 1-Aethylhexahydropyridin. d-Bromcamphersulfonat (*Soc.* 83, 1144 *C.* 1903 [2] 1063).  
 31) 1-Amidomethylhexahydrobenzol. *Sd.* 163°<sub>740</sub> (*C.* 1904 [1] 1214).  
 32) Methylamidohexahydrobenzol. *Sd.* 145° (*C. r.* 138, 1258 *C.* 1904 [2] 105).  
 33) 2,5-Dimethylhexahydropyridin. *Sd.* 138—140° (*HCl*, (2*HCl*, *PtCl*<sub>4</sub>), (*HCl*, *AuCl*<sub>3</sub>), *HBr*, *HJ* (*C.* 1903 [1] 1034; *B.* 37, 2063 *C.* 1904 [2] 123).
- C<sub>7</sub>H<sub>15</sub>Br** \*1)  $\alpha$ -Bromheptan. *Sd.* 175,5—177,5°<sub>765</sub> (*C.* 1903 [1] 961).  
 \*2)  $\beta$ -Bromheptan (*C.* 1903 [2] 100).
- C<sub>7</sub>H<sub>16</sub>O** \*1)  $\alpha$ -Oxyheptan. *Sd.* 175° (*M.* 25, 1087 *C.* 1904 [2] 1698).  
 \*7)  $\zeta$ -Oxy- $\beta$ -Methylbutan. *Sd.* 167—169°<sub>755</sub> (*C. r.* 136, 1261 *C.* 1903 [2] 106).  
 \*9)  $\gamma$ -Oxy- $\gamma$ -Aethylpentan. *Sd.* 142°<sub>764</sub> (*B.* 36, 1009 *C.* 1903 [1] 1077; *C.* 1903 [2] 1415).

- $C_7H_{16}O$  18) Isopropyläther d.  $\beta$ -Oxy- $\beta$ -Methylpropan. Sd. 75—76°<sub>788</sub> (C. 1904 [1] 1065).
- $C_7H_{16}O_2$  11)  $\alpha\zeta$ -Dioxy- $\gamma$ -Methylhexan. Sd. 155°<sub>12</sub> (C. r. 137, 329 C. 1903 [2] 711).
- 12)  $\alpha\epsilon$ -Dioxy- $\beta\beta$ -Dimethylpentan. Sd. 134°<sub>10</sub> (C. r. 137, 329 C. 1903 [2] 711).
- $C_7H_{16}O_3$  \*5)  $\alpha\alpha$ -Diäthyläther d.  $\alpha\alpha\gamma$ -Trioxypropan (B. 36, 3658 C. 1903 [2] 1311).
- 7)  $\alpha\gamma\epsilon$ -Trioxy- $\beta\beta$ -Dimethylpentan. Fl. (M. 25, 1068 C. 1904 [2] 1599).
- 8)  $\delta$ -Oxy- $\gamma\gamma$ -Di[Oxymethyl]- $\gamma$ -Methylbutan. Sm. 83—83,5° (B. 36, 1342 C. 1903 [1] 1298).
- $C_7H_{16}N_2$  9) 1-Amido-2, 4-Dimethylhexahydropyridin. Sd. 170—175° (B. 37, 2065 C. 1904 [2] 123).
- 10) 1-Amido-2, 6-Dimethylhexahydropyridin. Sd. 170—175° (C. 1903 [1] 1034).
- $C_7H_{17}N$  15) act.  $\beta$ -Aethylamidopentan (Aethyl-act. sec. Amylamin). (2HCl, PtCl<sub>4</sub>) (C. 1904 [1] 923).
- 16)  $\alpha$ -Isopropylamido- $\beta$ -Methylpropan (Isopropylisobutylamin). (2HCl, PtCl<sub>4</sub>) (C. 1904 [1] 923).
- $C_7H_{18}Sn$  2) Zinndimethyläthylpropyl. Sd. 153°<sub>782</sub> (C. 1904 [1] 353).

## — 7 III —

- $C_7H_2OCl_4$  5) 2, 3, 5, 6-Tetrachlor-4-Keto-1-Methylen-1, 4-Dihydrobenzol. Sm. noch nicht bei 270° (A. 328, 295 C. 1903 [2] 1248).
- $C_7H_2O_4Br_2$  1) 1, 2-Carbonat d. 4, 6-Dibrom-1, 2, 3-Trioxybenzol. Sm. 146° (B. 37, 112 C. 1904 [1] 585).
- $C_7H_2NCl_3$  \*1) Nitril d. 2, 4, 6-Trichlorbenzol-1-Carbonsäure. Sm. 77,5° (R. 21, 384 C. 1903 [1] 152).
- $C_7H_2OCl_3$  \*3) Chlorid d. 2, 6-Dichlorbenzol-1-Carbonsäure. Sd. 142—143°<sub>21</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- \*4) Chlorid d. 3, 4-Dichlorbenzol-1-Carbonsäure. Sd. 159—160°<sub>42</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- 5) Chlorid d. 2, 3-Dichlorbenzol-1-Carbonsäure. Sd. 140°<sub>14</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- 6) Chlorid d. 2, 4-Dichlorbenzol-1-Carbonsäure. Sd. 150°<sub>34</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- 7) Chlorid d. 2, 5-Dichlorbenzol-1-Carbonsäure. Sd. 137°<sub>15</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- 8) Chlorid d. 3, 5-Dichlorbenzol-1-Carbonsäure. Sd. 135—137°<sub>25</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- $C_7H_3OCl_5$  3) 2, 2, 3, 5, 6-Pentachlor-1-Keto-4-Methyl-1, 2-Dihydrobenzol. Sm. 99—100° (A. 328, 285 C. 1903 [2] 1246).
- $C_7H_3O_2Cl_3$  \*6) 2, 4, 6-Trichlorbenzol-1-Carbonsäure. Sm. 164° (R. 21, 385 C. 1903 [1] 152).
- $C_7H_3O_3Cl_5$  4) 2, 2, 4, 4, 5-Pentachlor-1, 3-Diketo-6-Methyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 85° (A. 328, 308 C. 1903 [2] 1248).
- $C_7H_3O_3Cl_3$  3) 3, 3, 6-Trichlor-1, 2, 4-Triketo-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol + 2H<sub>2</sub>O? Sm. 77—78° (A. 328, 319 C. 1903 [2] 1247).
- $C_7H_3O_3Br_3$  \*2) 2, 4, 6-Tribrom-3-Oxybenzol-1-Carbonsäure +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 145—146° (G. 32 [2] 338 C. 1903 [1] 580).
- $C_7H_3O_4Br$  1) 1, 2-Carbonat d. 4-[oder 6]-Brom-1, 2, 3-Trioxybenzol. Sm. 155° (B. 37, 111 C. 1904 [1] 584).
- $C_7H_3O_3N$  2) Carbonat d. 4-Nitro-1, 2, 3-Trioxybenzol. Sm. 148—149° (B. 37, 113 C. 1904 [1] 555).
- $C_7H_3O_7N_3$  2) 2-Nitroso-4, 6-Dinitrobenzol-1-Carbonsäure. Sm. 229° u. Zers. + C<sub>6</sub>H<sub>6</sub> (B. 36, 962 C. 1903 [1] 969).
- $C_7H_3O_8N_3$  \*1) 2, 4, 6-Trinitrobenzol-1-Carbonsäure. Sm. 210° u. Zers. (R. 21, 380 C. 1903 [1] 151; Soc. 85, 237 C. 1904 [1] 1006).
- $C_7H_3NBr_2$  \*1) Nitril d. 3, 5-Dibrombenzol-1-Carbonsäure. Sm. 96,5—97° (C. 1903 [2] 1194).
- $C_7H_3N_2Br_3$  1) Nitril d.  $\beta$ -Tribrom-3-Amidobenzol-1-Carbonsäure. Sm. 177—178° (C. 1904 [2] 104).
- $C_7H_4OCl_4$  \*3) Methyläther d. 2, 3, 4, 6-Tetrachlor-1-Oxybenzol. Sm. 64—65° (B. 37, 4015 C. 1904 [2] 1716).
- 4) 2, 3, 5, 6-Trichlor-4-Oxy-1-Methylbenzol. Sm. 190° (A. 328, 281 C. 1903 [2] 1245).

- $C_7H_4OCl_4$  5) 2,2,5,6-Tetrachlor-1-Keto-4-Methyl-1,2-Dihydrobenzol? Sm. 106 bis 107° (A. 328, 283 C. 1903 [2] 1246).
- $C_7H_4OBr_4$  \*2) 2,4,5,6-Tetrabrom-3-Oxy-1-Methylbenzol. Sm. 191—192° (A. 333, 356 C. 1904 [2] 1116).
- \*7) 2,3,5-Tribrom-4-Oxy-1-Brommethylbenzol. Sm. 122° (A. 334, 330 C. 1904 [2] 988).
- $C_7H_4OS_2$  1) Thiocarbonylthiobrenzkatechin. Sm. 99,5° (C. 1904 [2] 1176).
- $C_7H_4O_2N_2$  \*2) Nitril d. 2-Nitrobenzol-1-Carbonsäure. Sm. 109,5° (C. 1903 [1] 174).
- \*3) Nitril d. 3-Nitrobenzol-1-Carbonsäure. Sm. 117—117,5° (C. 1904 [2] 100).
- \*5) Imid d. Pyridin-2,3-Dicarbonsäure. K (B. 37, 2131 C. 1904 [2] 232).
- $C_7H_4O_2Cl_2$  \*4) 2,4-Dichlorbenzol-1-Carbonsäure. Sm. 156—158° (B. 37, 221 C. 1904 [1] 588).
- \*10) Aldehyd d. 3,5-Dichlor-4-Oxybenzol-1-Carbonsäure. Sm. 158—159° (B. 37, 4033 C. 1904 [2] 1719).
- 12) Aldehyd d. 3,5-Dichlor-2-Oxybenzol-1-Carbonsäure. Sm. 95° (B. 37, 4027 C. 1904 [2] 1718).
- $C_7H_4O_2Cl_4$  5) 2,3,5,6-Tetrachlor-4-Keto-1-Oxy-1-Methyl-1,4-Dihydrobenzol. Sm. 166° (B. 28, 3122; A. 328, 300 C. 1903 [2] 1248). — \*III, 251.
- $C_7H_4O_2Br_2$  \*8) 3,5-Dibrombenzol-1-Carbonsäure. Sm. 219,5—220,5° (C. 1903 [2] 1194).
- $C_7H_4O_2Br_4$  5) Aldehyd d. p-Tetrabrom-3-Oxy-p-Dihydrobenzol-1-Carbonsäure. Sm. 118° (D.R.P. 68583). — \*III, 48.
- $C_7H_4O_3Cl_2$  \*2) 3,5-Dichlor-2-Oxybenzol-1-Carbonsäure. Sm. 219° (B. 37, 4030 C. 1904 [2] 1718).
- 6) 3,6-[oder 5,6]-5[oder 3]-Oxy-2-Methyl-1,4-Benzochinon. Sm. 157 bis 158° (A. 328, 321 C. 1903 [2] 1247).
- $C_7H_4O_3Cl_4$  1) Ketochlorid +  $H_2O$  (aus 3,5,6-Trichlor-1,2-Dioxy-4-Keto-1-Methyl-1,4-Dihydrobenzol). Sm. 97° (103° wasserfrei) (A. 328, 307 C. 1903 [2] 1248).
- $C_7H_4O_3Cl_6$  4) Säure (aus 2,2,4,4,5-Pentachlor-1,3-Diketo-6-Methyl-1,2,3,4-Tetrahydrobenzol). Sm. 133° (A. 328, 310 C. 1903 [2] 1248).
- $C_7H_4O_3Br_2$  \*2) 3,5-Dibrom-2-Oxybenzol-1-Carbonsäure. Sm. 221° (Soc. 81, 1480 C. 1903 [1] 144).
- \*3) 3,5-Dibrom-4-Oxybenzol-1-Carbonsäure. Sm. 266° u. Zers. (G. 33 [1] 70 C. 1903 [1] 876).
- 8) 4,6-Dibrom-3-Oxybenzol-1-Carbonsäure. Sm. 194—195° (G. 32 [2] 337 C. 1903 [1] 579).
- 9) 4,6[p]-Dibrom-3-Oxybenzol-1-Carbonsäure +  $H_2O$ . Sm. 202° (Soc. 81, 1483 C. 1903 [1] 23, 144).
- $C_7H_4O_3Hg$  2) Anhydrid d. Oxymerkursalicylsäure (G. 32 [2] 306 C. 1903 [1] 578). C 32,8 — H 1,5 — O 50,8 — N 21,9 — M. G. 256.
- $C_7H_4O_3N_4$  1) 2,4,6-Trinitrobenzaloxim. Sm. 158° (B. 36, 961 C. 1903 [1] 969).
- 2) Amid d. 2,4,6-Trinitrobenzol-1-Carbonsäure. Sm. 264° u. Zers. (R. 21, 382 C. 1903 [1] 152).
- $C_7H_4O_3N_4$  C 29,2 — H 1,4 — O 50,0 — N 19,4 — M. G. 288.
- 1) Methyläther d. 2,3,5,6-Tetranitro-1-Oxybenzol. Sm. 112° (und 154°). +  $C_6H_6$  (R. 23, 115 C. 1904 [2] 205).
- $C_7H_4N_2Br_2$  3) Nitril d. 3,5-Dibrom-2-Amidobenzol-1-Carbonsäure. Sm. 156 bis 156,5° (C. 1903 [2] 1194).
- $C_7H_5ON$  \*1) Benzoxazol. Sm. 30—31°; Sd. 182—183°. +  $HgCl_2$  (B. 36, 2054 C. 1903 [2] 383).
- \*2) Anthranil. (2HCl,  $SnCl_4$ ) (B. 36, 819 C. 1903 [1] 1026; B. 36, 831 C. 1903 [1] 1027; B. 36, 839 C. 1903 [1] 1028; B. 36, 2465 C. 1903 [2] 559; B. 36, 3637 C. 1903 [2] 1331; B. 36, 3645 C. 1903 [2] 1332; B. 36, 4295 C. 1904 [1] 507; B. 36, 4178 C. 1904 [1] 278; B. 37, 966 C. 1904 [1] 1078).
- \*3) Nitril d. 2-Oxybenzol-1-Carbonsäure. Sm. 98°.  $NH_4$ , Anilinsalz (B. 36, 581 C. 1903 [1] 709).
- \*8) Phenylisocyanat. Sm. 162° (B. 36, 2477 C. 1903 [2] 559; M. 24, 851 C. 1904 [1] 364).

- $C_7H_5ON_3$  \*3) 4-Keto-3,4-Dihydro-1,2,3-Benzotriazin (*J. pr.* [2] 69, 102 *C.* 1904 [1] 730).
- $C_7H_5OCl$  \*4) Chlorid d. Benzolcarbonsäure. +  $FeCl_3$  (*Am.* 29, 141 *C.* 1903 [1] 715; *R.* 22, 316 *C.* 1903 [2] 203).
- $C_7H_5OCl_3$  4) 2,3,5-Trichlor-4-Oxy-1-Methylbenzol. *Sm.* 66–67° (*A.* 328, 279 *C.* 1903 [2] 1245).
- $C_7H_5OCl_7$  1) 1,2,3,3,5,5,6-Heptachlor-4-Keto-1-Methyl-1,4-Dihydrobenzol. *Sm.* 110° (*A.* 328, 286 *C.* 1903 [2] 1245).
- $C_7H_5OBr$  \*3) Aldehyd d. 4-Brombenzol-1-Carbonsäure. *Sm.* 57° (*B.* 37, 188 *C.* 1904 [1] 638).
- \*4) 3,5-Dibrom-4-Oxy-1-Brommethylbenzol. *Sm.* 149–150° (*B.* 36, 1883 *C.* 1903 [2] 290).
- $C_7H_5O_2N$  \*3) Aldehyd d. 3-Nitrosobenzol-1-Carbonsäure (*B.* 36, 2310 *C.* 1903 [2] 429; *Am.* 30, 111 *C.* 1903 [2] 719).
- \*4) Aldehyd d. 4-Nitrosobenzol-1-Carbonsäure. *Sm.* 137,5° (*B.* 36, 2308 *C.* 1903 [2] 429; *Am.* 30, 111 *C.* 1903 [2] 719).
- 7) Verbindung (aus 2-Nitro-1-Oxymethylbenzol). =  $(C_7H_5O_2N)_x$ . Zers. bei 237° (*B.* 37, 3429 *C.* 1904 [2] 1213).
- $C_7H_5O_2N_3$  \*1) 6-Nitroindazol. *Sm.* 181°.  $HCl$ ,  $(2HCl, PtCl_4)$  (*B.* 37, 2577 *C.* 1904 [2] 658).
- \*2) 6-Nitrobenzimidazol (*B.* 36, 3968 *C.* 1904 [1] 177).
- 18) 4-Nitroindazol. *Sm.* 203°.  $(2HCl, PtCl_4)$  (*B.* 37, 2582 *C.* 1904 [2] 659).
- 19) 5-Nitroindazol. *Sm.* 208° (*B.* 37, 2584 *C.* 1904 [2] 659).
- 20) 7-Nitroindazol. *Sm.* 186,5–187,5° (*B.* 37, 2575 *C.* 1904 [2] 658).
- 21) 1,2,9-Benzisotriazol-5-Carbonsäure (*B.* 36, 1114 *C.* 1903 [1] 1184).
- 22) Nitril d. 3-Nitrophenylamidoameisensäure. *Sm.* 133–134° (*C.* 1903 [2] 111).
- $C_7H_5O_2Cl$  \*3) 2-Chlorbenzol-1-Carbonsäure. *Sm.* 142° (*C.* 1903 [2] 550; *D.R.P.* 146174 *C.* 1903 [2] 1224).
- \*6) Aldehyd d. 5-Chlor-2-Oxybenzol-1-Carbonsäure. *Sm.* 99,5° (*B.* 37, 4024 *C.* 1904 [2] 1717).
- 9) Aldehyd d. 3-Chlor-4-Oxybenzol-1-Carbonsäure. *Sm.* 156° (139°) (*B.* 10, 2196; *G.* 23 [1] 235; *D.R.P.* 105798 *C.* 1900 [1] 523; *B.* 37, 4032 *C.* 1904 [2] 1718). — III, 82; \*III, 60.
- $C_7H_5O_2Cl_3$  7) 3,5,6-Trichlor-2,4-Dioxy-1-Methylbenzol. *Sm.* 134° (*A.* 328, 307 *C.* 1903 [2] 1248).
- 8) 2,3,5-Trichlor-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. *Sm.* 89 bis 90° (*A.* 328, 299 *C.* 1903 [2] 1248).
- $C_7H_5O_2Br$  \*3) 2-Brombenzol-1-Carbonsäure.  $(NH_4)H$ ,  $KH$  (*Soc.* 83, 1443 *C.* 1904 [1] 510; *Soc.* 85, 243 *C.* 1904 [1] 1006).
- \*4) 3-Brombenzol-1-Carbonsäure. +  $H_2SO_4$ ,  $(NH_4)H$ ,  $K$  (*R.* 21, 350 *C.* 1903 [1] 150; *Soc.* 83, 1443 *C.* 1904 [1] 510; *Soc.* 85, 243 *C.* 1904 [1] 1006).
- \*5) 4-Brombenzol-1-Carbonsäure.  $(NH_4)H$ ,  $KH$  (*Soc.* 83, 1443 *C.* 1904 [1] 510).
- \*6) Aldehyd d. 5-Brom-2-Oxybenzol-1-Carbonsäure. *Sm.* 104–105° (*B.* 37, 3934 *C.* 1904 [2] 1596).
- 8) Aldehyd d. p-Brom-3-Oxybenzol-1-Carbonsäure. *Sm.* 40–45° (*D.R.P.* 28078). — \*III, 58.
- $C_7H_5O_2Br_3$  \*5) Monomethyläther d. 4,5,6-Tribrom-1,2-Dioxybenzol (*C. r.* 135, 968 *C.* 1903 [1] 145).
- $C_7H_5O_2J$  \*2) 2-Jodbenzol-1-Carbonsäure. *Sm.* 162° (*H.* 37, 436 *C.* 1903 [1] 1150; *Soc.* 85, 1272 *C.* 1904 [2] 1303).
- \*3) 3-Jodbenzol-1-Carbonsäure. *Sm.* 187–188° (*Soc.* 85, 1273 *C.* 1904 [2] 1303).
- \*4) 4-Jodbenzol-1-Carbonsäure. *Sm.* 265° (*Soc.* 85, 1274 *C.* 1904 [2] 1303).
- 10) Aldehyd d. p-Jod-2-Oxybenzol-1-Carbonsäure. *Sm.* 52–54° (*J. pr.* [2] 59, 116). — \* I, 51.
- $C_7H_5O_3N$  \*2) 2-Nitrosobenzol-1-Carbonsäure. *Sm.* 213° u. Zers. (*R.* 22, 298 *C.* 1903 [2] 231; *B.* 36, 3651 *C.* 1903 [2] 1332; *B.* 37, 3430 *C.* 1904 [2] 1214).
- \*3) Aldehyd d. 2-Nitrobenzol-1-Carbonsäure (*B.* 36, 819 *C.* 1903 [1] 1025; *Bk.* [3] 31, 134 *C.* 1904 [1] 721).

- $C_7H_5O_3N$  \*4) Aldehyd d. 3-Nitrobenzol-1-Carbonsäure (B. 36, 819 C. 1903 [1] 1025).  
 \*5) Aldehyd d. 4-Nitrobenzol-1-Carbonsäure (B. 36, 819 C. 1903 [1] 1025).  
 6) 3-Nitrosobenzol-1-Carbonsäure. Zers. bei  $230^\circ$  (B. 37, 334 C. 1904 [1] 658).  
 7) 4-Nitrosobenzol-1-Carbonsäure. Zers. bei  $250^\circ$  (B. 37, 334 C. 1904 [1] 658).  
 8) Gem. Anhydrid d. Salpetrigensäure u. Benzolcarbonsäure. Fl. (G. 34 [1] 444 C. 1904 [2] 511).
- $C_7H_5O_3Cl$  \*4) 5-Chlor-2-Oxybenzol-1-Carbonsäure. Sm.  $168^\circ$  (B. 37, 4027 C. 1904 [2] 1718).  
 \*6) 3-Chlor-4-Oxybenzol-1-Carbonsäure. Sm.  $169^\circ$  (B. 37, 4035 C. 1904 [2] 1719).
- $C_7H_5O_3Cl_3$  4) 3,5,6-Trichlor-1,2-Dioxy-4-Keto-1-Methyl-1,4-Dihydrobenzol +  $H_2O$ . Sm.  $125^\circ$  (A. 328, 304 C. 1903 [2] 1248).
- $C_7H_5O_3Cl_5$  4) Säure (aus 2,2,4,4,5-Pentachlor-1,3-Diphenyl-1,2,3,4-Tetrahydrobenzol). Sm.  $115^\circ$  (A. 328, 309 C. 1903 [2] 1248).
- $C_7H_5O_3Br$  \*3) 5-Brom-2-Oxybenzol-1-Carbonsäure. Sm.  $1228^\circ$  (C. 1904 [2] 204, 1032).  
 \*4) 3-Brom-4-Oxybenzol-1-Carbonsäure +  $H_2O$ . Sm.  $156^\circ$  (G. 33 [1] 69 C. 1903 [1] 876).  
 7) 6-Brom-3-Oxybenzol-1-Carbonsäure. Sm.  $221^\circ$  (G. 32 [2] 335 C. 1903 [1] 579).
- $C_7H_5O_4N$  \*3) 2-Nitrobenzol-1-Carbonsäure. KH (B. 36, 1799 C. 1903 [2] 283; Soc. 83, 1444 C. 1904 [1] 510; Soc. 85, 241 C. 1904 [1] 1006).  
 \*4) 3-Nitrobenzol-1-Carbonsäure.  $(NH_4)H$ , KH (Soc. 83, 1444 C. 1904 [1] 510; Soc. 85, 242 C. 1904 [1] 1006).  
 \*5) 4-Nitrobenzol-1-Carbonsäure.  $(NH_4)H$ , KH (Soc. 83, 1444 C. 1904 [1] 510; Soc. 85, 242 C. 1904 [1] 1006).  
 \*9) Pyridin-2,6-Dicarbonsäure.  $NaH + 3H_2O$  (M. 24, 205 C. 1903 [2] 48).  
 \*10) Pyridin-3,4-Dicarbonsäure (M. 24, 203 C. 1903 [2] 48).  
 19) 3-Nitro-2-Methyl-1,4-Benzochinon. Sm.  $64-65^\circ$  (Soc. 85, 528 C. 1904 [1] 1256, 1499).
- $C_7H_5O_4N_3$  \*2) Nitril d. 6-Nitro-2-Hydroxylamido-3-Oxybenzol-1-Carbonsäure (Metapurpursäure). Zers. bei  $92^\circ$ .  $NH_4$ , K +  $2H_2O$ ,  $BaOH + H_2O$  (B. 33, 2718; B. 37, 1847 C. 1904 [1] 1492). — \*II, 380.
- $C_7H_5O_4Cl$  1) Methyl ester d. 3-Chlor-1,2-Pyron-5-Carbonsäure. Sm.  $138,5^\circ$  (B. 37, 3831 C. 1904 [2] 1614).
- $C_7H_5O_4Br$  5) Acetyl bromisobrenzschleimsäure. Sm.  $76^\circ$  (C. r. 136, 50 C. 1903 [1] 443).
- $C_7H_5O_5N$  \*4) 5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm.  $220-230^\circ$  (C. 1903 [2] 559).  
 17) 6-Nitro-2-Oxybenzol-1-Carbonsäure? Sm.  $130^\circ$  (B. 35, 3865 C. 1903 [1] 154).  
 18) Aldehyd d. 2-Nitro-3,4-Dioxybenzol-1-Carbonsäure. Sm.  $176^\circ$ .  $K_2$  (B. 36, 2931 C. 1903 [2] 888; B. 36, 3528 C. 1903 [2] 1378).  
 19) Aldehyd d. 5-Nitro-3,4-Dioxybenzol-1-Carbonsäure. Sm.  $106^\circ$ .  $K_2$  (B. 36, 2933 C. 1903 [2] 888).
- $C_7H_5O_6N_3$  \*2) Amid d. 3,5-Dinitrobenzol-1-Carbonsäure. Sm.  $183^\circ$  (J. pr. [2] 69, 461 C. 1904 [2] 595).
- $C_7H_5O_6N$  4) 2-Nitro-2,4-Dioxybenzol-1-Carbonsäure +  $\frac{1}{2}H_2O$ . Sm.  $215^\circ$  (wasserfrei).  $Na_2$ ,  $Na_3$ ,  $K_2$ ,  $K_3$ , Ba +  $3H_2O$ ,  $Ba_2 + 10H_2O$ , Ag,  $Ag_2$  (M. 25, 25 C. 1904 [1] 723).
- $C_7H_5O_7N$  \*1) Oximidokomensäure? (G. 33 [2] 233 C. 1904 [1] 45).
- $C_7H_5O_7N_3$  \*1) 3,4,5-Trinitro-2-Oxy-1-Methylbenzol (J. pr. [2] 67, 553 C. 1903 [2] 240).  
 \*3) Methyläther d. 2,4,6-Trinitro-1-Oxybenzol. Sm.  $58^\circ$  (Am. 29, 104 C. 1903 [1] 708; R. 22, 269 C. 1903 [2] 198).  
 5) Methyläther d. 2,3,5-Trinitro-1-Oxybenzol. Sm.  $104^\circ$  (R. 23, 112 C. 1904 [2] 205).
- $C_7H_6N_2Cl$  4) 5- oder 6-Chlorbenzimidazol. Sm.  $125^\circ$ .  $(2HCl, PtCl_4)$ ,  $(HCl, AuCl_3)$  (B. 37, 556 C. 1904 [1] 893).

- $C_7H_5ClF_2$  \*1) Chlordifluormethylbenzol (*C.* 1903 [1] 14).  
 $C_7H_6ON_2$  \*3) 1,3-Phenylenharbstoff (D.R.P. 146914 *C.* 1903 [2] 1486).  
 13) Phenylecyanhydroxylamin. 2HCl (*B.* 37, 1540 *C.* 1904 [1] 1411).  
 14) isom. 3-Keto-1,3-Dihydroindazol? Sm. 206°. (Cu, CuSO<sub>4</sub>) (*J. pr.* [2] 69, 94 *C.* 1904 [1] 729).  
 $C_7H_6OCl_2$  \*5) 3,5-Dichlor-4-Oxy-1-Methylbenzol. Sm. 39°; Sd. 235–240° (*A.* 328, 278 *C.* 1903 [2] 1245).  
 $C_7H_6O_2N_2$  11) Ricininsäure. Zers. bei 320° (*C. r.* 138, 506 *C.* 1904 [1] 896).  
 $C_7H_6O_2Cl_2$  8) 3,5-Dichlor-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 123° (*A.* 328, 298 *C.* 1903 [2] 1248).  
 $C_7H_6O_2Br_2$  8) 1-Methyläther d. p-Dibrom-1,2-Dioxybenzol. Sm. 94–95° (*C.* 1903 [1] 1339).  
 $C_7H_6O_3N_2$  \*4) anti-2-Nitrobenzaldoxim. Sm. 102–103° (*B.* 36, 4268 *C.* 1904 [1] 374).  
 \*5) syn-2-Nitrobenzaldoxim. Sm. 148–150° (*B.* 36, 4269 *C.* 1904 [1] 374).  
 \*6) anti-3-Nitrobenzaldoxim. Sm. 121° (*B.* 36, 4270 *C.* 1904 [1] 374; *B.* 37, 180 *C.* 1904 [1] 880).  
 \*7) syn-3-Nitrobenzaldoxim (*B.* 36, 4270 *C.* 1904 [1] 374; *B.* 37, 181 *C.* 1904 [1] 880).  
 \*8) anti-4-Nitrobenzaldoxim. Sm. 130° (*B.* 36, 4269 *C.* 1904 [1] 374).  
 \*9) syn-4-Nitrobenzaldoxim. Sm. 174° (*B.* 36, 4269 *C.* 1904 [1] 374).  
 25) 3-Nitro-4-Nitroso-1-Methylbenzol. Sm. 145–145,4° (*B.* 36, 3821 *C.* 1904 [1] 18).  
 26) Aldehyd d. 4-Nitro-2-Amidobenzol-1-Carbonsäure. Sm. 124° (*B.* 37, 1862 *C.* 1904 [1] 1600).  
 27) Aldehyd d. 5-Nitro-2-Amidobenzol-1-Carbonsäure. Sm. 200,5 bis 201° (*M.* 24, 98 *C.* 1903 [1] 921).  
 28) Aldehyd d. 6-Nitro-3-Amidobenzol-1-Carbonsäure (*M.* 24, 8 *C.* 1903 [1] 775).  
 29) Aldehyd d. 3-Nitro-4-Amidobenzol-1-Carbonsäure. Sm. 190,5 bis 191° (*M.* 24, 92 *C.* 1903 [1] 921).  
 $C_7H_6O_3Cl_2$  6) 3,6-Dichlor-2,4,5-Triox-1-Methylbenzol. Sm. 77–78° (*A.* 328, 320 *C.* 1903 [2] 1247).  
 $C_7H_6O_3Br_2$  \*1) 3,5-Dibrom-2,4,6-Triox-1-Methylbenzol. Sm. 132–134° (*M.* 25, 315 *C.* 1904 [1] 1494).  
 $C_7H_6O_4N_2$  \*7) 2,4-Dinitro-1-Methylbenzol. Sm. 71° (*C.* 1903 [2] 194).  
 \*8) 2,5-Dinitro-1-Methylbenzol. Sm. 48° (*C.* 1903 [2] 194).  
 \*13) 2,4-Dinitroso-3,5-Dioxy-1-Methylbenzol (*B.* 37, 1406 *C.* 1904 [1] 1416).  
 \*17) 3-Nitro-2-Amidobenzol-1-Carbonsäure (*C.* 1903 [2] 1174).  
 \*19) 5-Nitro-2-Amidobenzol-1-Carbonsäure. Sm. 269,5° (*B.* 36, 1802 *C.* 1903 [2] 283).  
 \*24) 3-Nitro-4-Amidobenzol-1-Carbonsäure. Sm. 284° (D.R.P. 151725 *C.* 1904 [1] 1588).  
 32) 6-Nitro-2-Amidobenzol-1-Carbonsäure. Sm. 180° u. Zers. (*B.* 35, 3863 *C.* 1903 [1] 154).  
 33) Amid d. 1,4-Pyron-2,6-Dicarbonsäure (*B.* 37, 3752 *C.* 1904 [2] 1539).  
 $C_7H_6O_4N_4$  2) 2,6-Diketo-3-Methylpurin-8-Carbonsäure + 2H<sub>2</sub>O (D.R.P. 153121 *C.* 1904 [2] 625).  
 $C_7H_6O_4Cl_2$  1) Verbindung (aus 2-Amido-3,5-Dioxy-1-Methylbenzol). Sm. 117° (*B.* 37, 1428 *C.* 1904 [1] 1418).  
 $C_7H_6O_4S$  6) Aldehyd d. Benzol-1-Carbonsäure-4-Sulfonsäure. Na (D.R.P. 154528 *C.* 1904 [2] 1269).  
 $C_7H_6O_4Hg$  1) Oxymerkurosäure. NH<sub>4</sub> (*G.* 32 [2] 308 *C.* 1903 [1] 579).  
 $C_7H_6O_5N_2$  \*7) Methyläther d. 2,3-Dinitro-1-Oxybenzol. Sm. 118,8° (*Am.* 29, 447 *C.* 1903 [1] 510; *R.* 22, 280 *C.* 1903 [2] 198).  
 \*8) Methyläther d. 2,4-Dinitro-1-Oxybenzol. Sm. 86,9° (*Am.* 29, 447 *C.* 1903 [1] 510; *R.* 22, 267 *C.* 1903 [2] 198).  
 \*9) Methyläther d. 2,5-Dinitro-1-Oxybenzol. Sm. 97° (*Am.* 29, 447 *C.* 1903 [1] 510; *R.* 22, 280 *C.* 1903 [2] 198).  
 \*10) Methyläther d. 2,6-Dinitro-1-Oxybenzol. Sm. 117,5° (*Am.* 29, 447 *C.* 1903 [1] 510; *R.* 22, 267 *C.* 1903 [2] 198).

- $C_7H_5O_5N_2$  \*11) Methyläther d. 3,4-Dinitro-1-Oxybenzol. Sm. 69,3° (*Am.* 29, 447 *C.* 1903 [1] 510; *R.* 22, 280 *C.* 1903 [2] 198).
- \*12) Methyläther d. 3,5-Dinitro-1-Oxybenzol. Sm. 105,8° (*Am.* 29, 447 *C.* 1903 [1] 510).
- $C_7H_5O_5N_4$  3) 2,6-Dinitro-4-Amidobenzaldoxim? Sm. 243° (*B.* 36, 961 *C.* 1903 [1] 969).
- $C_7H_5O_5S$  \*1) Benzol-1-Carbonsäure-2-Sulfonsäure.  $Na_2$  (*Am.* 30, 271 *C.* 1903 [2] 1119).
- \*2) Benzol-1-Carbonsäure-3-Sulfonsäure (*M.* 23, 1108 *C.* 1903 [1] 396).
- \*3) Benzol-1-Carbonsäure-4-Sulfonsäure.  $Na$  (*M.* 23, 1132 *C.* 1903 [1] 396).
- $C_7H_5O_6N_2$  \*2) 3,5-Dinitro-2,4-Dioxy-1-Methylbenzol. Sm. 90° (*J. pr.* [2] 67, 550 *C.* 1903 [2] 240; *J. pr.* [2] 67, 556 *C.* 1903 [2] 240).
- \*5) 1-Methyläther d. 3,5-Dinitro-1,2-Dioxybenzol. Sm. 122° (*M.* 23, 1030 *C.* 1903 [1] 288; *B.* 36, 2257 *C.* 1903 [2] 428; *R.* 23, 112 *C.* 1904 [2] 205).
- \*9) 1-Methyläther d. 4,6-Dinitro-1,3-Dioxybenzol. Sm. 110° (*R.* 23, 122 *C.* 1904 [2] 206).
- $C_7H_5O_6N_4$  \*3) 2,4,6-Trinitro-3-Amido-1-Methylbenzol. Sm. 138° (*R.* 21, 332 *C.* 1903 [1] 78).
- $C_7H_5O_6S$  \*1) 2-Oxybenzol-1-Carbonsäure-5-Sulfonsäure. ( $NH_4$ , HF) (*A.* 328, 146 *C.* 1903 [2] 992).
- $C_7H_5O_7S_2$  1) Aldehyd d. Benzol-1-Carbonsäure-2,4-Disulfonsäure.  $Na_2 + 2H_2O$  (D.R.P. 98321; D.R.P. 154528 *C.* 1904 [2] 1269). — \*III, 15.
- 2) Aldehyd d. Benzol-1-Carbonsäure-2,5-Disulfonsäure (D.R.P. 91315). — \*III, 16.
- $C_7H_5O_8S$  2) 3,4,5-Trioxymethylbenzol-1-Carbonsäure-2-Sulfonsäure.  $K, Ba + H_2O, Bi$  (D.R.P. 74602). — \*II, 1112.
- $C_7H_6NCl$  2) polym. Anhydroformaldehyd-m-Chloranilin. Sm. 228° (*B.* 36, 46 *C.* 1903 [1] 504).
- $C_7H_6NCl_3$  7) 2,5,6-Trichlor-3-Amido-1-Methylbenzol. Sm. 66—67° (*Soc.* 85, 1281 *C.* 1904 [2] 1293).
- $C_7H_6NBr_3$  10) 2,4,6-Tribrom-1-Methylamidobenzol. Sm. 37° (*B.* 37, 2344, 2346 *C.* 1904 [2] 433).
- $C_7H_6N_2S$  \*3) 1,4-Phenylenthioharnstoff. Sm. 279° (*Ar.* 241, 163 *C.* 1903 [2] 109).
- \*4) 1-Amidobenzthiazol (*A.* 212, 326; *B.* 36, 3135 *C.* 1903 [2] 1071).
- $C_7H_6N_3Cl$  1) p-Chlor-5-Amidindazol. Sm. 172—173° (*B.* 37, 2585 *C.* 1904 [2] 659).
- $C_7H_6ClBr$  \*2) 4-Brom-1-Chlormethylbenzol. Sm. 41°; *Sd.* 236° (*R.* 23, 99 *C.* 1904 [1] 1136).
- \*3) 3-Chlor-5-Brom-1-Methylbenzol. Sm. 25—26° (*Soc.* 85, 1269 *C.* 1904 [2] 1302).
- 6) 2-Chlor-3-Brom-1-Methylbenzol. *Sd.* 125—135°<sub>60</sub> (*Soc.* 85, 1266 *C.* 1904 [2] 1302).
- 7) 2-Chlor-4-Brom-1-Methylbenzol. *Sd.* 100—110°<sub>10</sub> (*Soc.* 85, 1267 *C.* 1904 [2] 1302).
- 8) 2-Chlor-5-Brom-1-Methylbenzol. *Sd.* 127—129°<sub>45</sub> (*Soc.* 85, 1267 *C.* 1904 [2] 1302).
- 9) 2-Chlor-6-Brom-1-Methylbenzol. *Sd.* 118—120°<sub>40</sub> (*Soc.* 85, 1268 *C.* 1904 [2] 1302).
- 10) 3-Chlor-2-Brom-1-Methylbenzol. *Sd.* 103—105°<sub>26</sub> (*Soc.* 85, 1266 *C.* 1904 [2] 1302).
- 11) 3-Chlor-4-Brom-1-Methylbenzol. *Sd.* 125—130°<sub>25</sub> (*Soc.* 85, 1269 *C.* 1904 [2] 1302).
- 12) 3-Chlor-6-Brom-1-Methylbenzol. *Sd.* 98—100°<sub>25</sub> (*Soc.* 85, 1267).
- 13) 4-Chlor-2-Brom-1-Methylbenzol. *Sd.* 112—114°<sub>12</sub> (*Soc.* 85, 1267 *C.* 1904 [2] 1302).
- 14) 4-Chlor-3-Brom-1-Methylbenzol. *Sd.* 120—125°<sub>23</sub> (*Soc.* 85, 1269 *C.* 1904 [2] 1302).
- $C_7H_7ON$  \*4) anti-Benzaldoxim. +  $HgNO_3$ , 2 +  $AgNO_3$  (*C.* 1903 [2] 878).
- \*8) Aldehyd d. 2-Amidobenzol-1-Carbonsäure (*C. r.* 136, 371 *C.* 1903 [1] 635; *M.* 24, 94 *C.* 1903 [1] 921; *B.* 36, 2046 *C.* 1903 [2] 382).
- \*10) Aldehyd d. 4-Amidobenzol-1-Carbonsäure (*M.* 24, 87 *C.* 1903 [1] 921).
- \*11) Amid d. Benzolcarbonsäure (*J. pr.* [2] 70, 307 *C.* 1904 [2] 1567).

- $C_7H_7ON$  \*12) Phenylamid d. Ameisensäure. Sm.  $47^\circ$ ; Sd.  $166^\circ_{14}$  (B. 36, 2476 C. 1903 [2] 559).  
 18) 4-Imido-1-Keto-2[oder 3]-Methyl-1,4-Dihydrobenzol. HCl (B. 37, 1680 C. 1904 [1] 1496).  
 19) isom. anti-Benzaldoxim. Sm.  $5^\circ$  (B. 37, 3043 C. 1904 [2] 1215).
- $C_7H_7OCl$  \*4) 3-Chlor-4-Oxy-1-Methylbenzol. Sd.  $194-196^\circ$  (A. 328, 277 C. 1903 [2] 1245).  
 \*9) 2-Chlor-1-Oxymethylbenzol. Sm.  $72^\circ$  (B. 37, 3696 C. 1904 [2] 1387).  
 10) 6-Chlor-2-Oxy-1-Methylbenzol. Sm.  $86^\circ$  (B. 37, 1019 C. 1904 [1] 1202).  
 11) 2-Chlor-4-Oxy-1-Methylbenzol. Sm.  $55^\circ$ ; Sd.  $228^\circ_{760}$  (D.R.P. 156333 C. 1904 [2] 1673).
- $C_7H_7OBr$  \*2) 3-Brom-1-Oxymethylbenzol. Sd.  $250^\circ$  (B. 37, 3693 C. 1904 [2] 1387).  
 11) 6-Brom-2-Oxy-1-Methylbenzol. Sm.  $95^\circ$  (B. 37, 1022 C. 1904 [1] 1203).  
 12) 2-Brom-4-Oxy-1-Methylbenzol. Sm.  $55-56^\circ$ ; Sd.  $245-246^\circ$  (D.R.P. 156333 C. 1904 [2] 1673).
- $C_7H_7OJ$  \*9) 3-Jodoso-1-Methylbenzol. Zers. bei  $206-207^\circ$ .  $HClO_4$ ,  $HJO_3$ ,  $HNO_3$ ,  $H_2CrO_4$ ,  $H_2SO_4$  (A. 327, 269 C. 1903 [2] 350).  
 10) 6-Jod-2-Oxy-1-Methylbenzol. Sm.  $90^\circ$  (B. 37, 1024 C. 1904 [1] 1203).
- $C_7H_7O_2N$  \*3) 2-Nitro-1-Methylbenzol. +  $AlCl_3$  (Bl. [3] 31, 133 C. 1904 [1] 721; Soc. 85, 1108 C. 1904 [2] 976).  
 \*5) 4-Nitro-1-Methylbenzol (B. 36, 4260 C. 1904 [1] 402).  
 \*14) Benzhydroxamsäure (G. 33 [2] 241 C. 1904 [1] 24; G. 33 [2] 305 C. 1904 [1] 288).  
 \*16) 2-Amidobenzol-1-Carbonsäure (C. 1903 [1] 922; D.R.P. 146716 C. 1903 [2] 1226; D.R.P. 145604 C. 1903 [2] 1099; B. 37, 592 C. 1904 [1] 881).  
 \*25) Pyridinbetaïn. HCl (A. 326, 318 C. 1903 [1] 1088).  
 \*27) Methylbetaïn d. Pyridin-3-Carbonsäure (M. 24, 709 C. 1904 [1] 218).  
 \*39) 2-Methylpyridin-6-Carbonsäure. Sm.  $128-129^\circ$  (B. 36, 2908 C. 1903 [2] 890).  
 \*40) Methylbetaïn d. Pyridin-4-Carbonsäure. Sm.  $264^\circ$  (M. 24, 705 C. 1903 [2] 1282; M. 24, 710 C. 1904 [1] 218).  
 \*43) Methyläther d. 4-Nitroso-1-Oxybenzol. Sm.  $23^\circ$  (B. 37, 44 C. 1904 [1] 654).  
 45) 2-Nitroso-1-Oxymethylbenzol. Sm.  $101^\circ$  (B. 36, 838 C. 1903 [1] 1028).  
 46) 2-Formylamido-1-Oxybenzol. Sm.  $129-129,5^\circ$  (B. 36, 833 C. 1903 1027; B. 36, 2044 C. 1903 [2] 383; B. 36, 2052 C. 1903 [2] 383).  
 47) 4-Formylamido-1-Oxybenzol. Sm.  $139-140^\circ$  (D.R.P. 146265 C. 1903 [2] 1227).  
 48) Aldehyd d. 4-Hydroxylamidobenzol-1-Carbonsäure (D.R.P. 89978 C. 1897 [1] 351; B. 36, 2304 C. 1903 [2] 428).
- $C_7H_7O_2N_3$  \*5) 4-Semicarbazol-1-Keto-1,4-Dihydrobenzol. Zers. bei  $178^\circ$  (A. 334, 175 C. 1904 [2] 834).  
 \*11) Amid d. Pyridin-2,6-Dicarbonsäure. Sm.  $302^\circ$  (M. 24, 207 C. 1903 [2] 48).  
 \*15)  $\alpha$ -Nitroso- $\alpha$ -Phenylharnstoff (M. 24, 853 C. 1904 [1] 364).  
 21) Äthylester d.  $\alpha\beta$ -Dicyan- $\beta$ -Imidopropionsäure. Sm.  $162^\circ$  u. Zers. (A. 332, 155 C. 1904 [2] 192).
- $C_7H_7O_2Br$  7) 2-Brom-4-Oxy-1-Oxymethylbenzol. Sm.  $137-138^\circ$  (A. 334, 330 C. 1904 [2] 988).
- $C_7H_7O_2J$  \*6) 3-Jodo-1-Methylbenzol. Zers. bei  $220^\circ$  (A. 327, 272 C. 1903 [2] 350).
- $C_7H_7O_3N$  \*2) 2-Nitro-1-Oxymethylbenzol (B. 37, 3429 C. 1904 [2] 1213).  
 \*5) 3-Nitro-2-Oxy-1-Methylbenzol. Sm.  $64,5^\circ$ .  $Na + 2H_2O$ ,  $K + \frac{1}{2}H_2O$ ,  $Rb + H_2O$  (Am. 30, 320 C. 1903 [2] 1116; A. 330, 98 C. 1904 [1] 1076).  
 \*7) 5-Nitro-2-Oxy-1-Methylbenzol. Sm.  $93-95^\circ$  (A. 330, 94 C. 1904 [1] 1075).  
 \*8) 6-Nitro-2-Oxy-1-Methylbenzol. Sm.  $145^\circ$  (B. 37, 1020 C. 1904 [1] 1202).

- $C_7H_7O_3N$  \*13) 3-Nitro-4-Oxy-1-Methylbenzol. Sm. 34° (*Am.* 32, 15 *C.* 1904 [2] 696).  
 \*17) Methyläther d. 4-Nitro-1-Oxybenzol (*R.* 23, 37 *C.* 1904 [1] 1137).  
 \*18) 2-Nitroso-3,5-Dioxy-Methylbenzol (*B.* 36, 882 *C.* 1903 [1] 964).  
 46) 1-Methyläther d. 4-Nitroso-1,3-Dioxybenzol. *K.* (*B.* 35, 1477 *C.* 1902 [1] 1208; *J. pr.* [2] 70, 337 *C.* 1904 [2] 1542).  
 47) 5-Methyläther d. 2-Oximido-5-Oxy-1-Keto-1,2-Dihydrobenzol. Sm. 168° (*B.* 35, 1478 *C.* 1902 [1] 1208; *J. pr.* [2] 70, 337 *C.* 1904 [2] 1542).  
 48) 3-Amido-1-Oxybenzol-*p*-Carbonsäure. Sm. 148° u. Zers.  $HCl$ ,  $H_2SO_4$  (*D.R.P.* 50835). — \*II, 915.
- $C_7H_7O_3N_3$  \*2) 3-Nitro-1-Methylnitrosamidobenzol. Sm. 67° (*A.* 327, 112 *C.* 1903 [1] 1213).  
 \*3) 4-Nitro-1-Methylnitrosamidobenzol. Sm. 104° (*A.* 327, 113 *C.* 1903 [1] 1213).  
 22) 4-Nitro-2-Amidobenzaldoxim. Sm. 193° (*B.* 37, 1864 *C.* 1904 [1] 1600).  
 23) 5-Nitro-2-Amidobenzaldoxim. Sm. 203° (*M.* 24, 98 *C.* 1903 [1] 922).
- $C_7H_7O_3Br$  4) 3-Brom-2,4,6-Trioxy-1-Methylbenzol +  $4H_2O$ . Sm. 129—130° (*M.* 25, 316 *C.* 1904 [1] 1494).
- $C_7H_7O_4N$  \*4) 2-Nitro-3,5-Dioxy-1-Methylbenzol ( $\beta$ -Nitroorcine). Sm. 122°. *K*, *Ag* (*B.* 36, 887 *C.* 1903 [1] 965).  
 \*5) 4-Nitro-3,5-Dioxy-1-Methylbenzol ( $\alpha$ -Nitroorcine). Sm. 127° (*B.* 36, 887 *C.* 1903 [1] 965).  
 \*6) 2-Methyläther d. 4-Nitro-1,2-Dioxybenzol. Sm. 105° (*B.* 36, 2257 *C.* 1903 [2] 428).  
 \*7) 1-Methyläther d. 4-Nitro-1,3-Dioxybenzol. Sm. 95° (*R.* 21, 322 *C.* 1903 [1] 79).  
 \*10) Pyromekursäure. Sm. 165° (*B.* 37, 2956 *C.* 1904 [2] 993).  
 \*13) Amid d. 3,4,5-Trioxybenzol-1-Carbonsäure.  $BiOH + H_2O$  (*Bl.* [3] 29, 531 *C.* 1903 [2] 243).  
 19) 6-Nitro-2,5-Dioxy-1-Methylbenzol. Sm. 117—118° (*Soc.* 85, 528 *C.* 1904 [1] 1256, 1490).  
 20) 1-Methyläther d. 3-Nitro-1,2-Dioxybenzol. Sm. 103° (*B.* 36, 2257 *C.* 1903 [2] 428).  
 21) 3-Methyläther d. 4-Oximido-3,5-Dioxy-1-Keto-1,4-Dihydrobenzol. *K*, *Ag* (*M.* 23, 949 *C.* 1903 [1] 285).  
 22) *p*-Amido-2,4-Dioxybenzol-1-Carbonsäure +  $H_2O$ . Sm. 193° (wasserfrei).  $HCl + 2H_2O$ ,  $H_2SO_4$  (*M.* 25, 41 *C.* 1904 [1] 723).  
 23) *p*-Acetylamidofuran-2-Carbonsäure. Zers. bei 285°.  $K + 5H_2O$ ,  $Ca + 7H_2O$  (*C. r.* 136, 1455 *C.* 1903 [2] 292).
- $C_7H_7O_4Cl_3$  2) Verbindung (aus 2-Amido-3,5-Dioxy-1-Methylbenzol). Sm. 97° (*B.* 37, 1427 *C.* 1904 [1] 1418).
- $C_7H_7O_5N$  \*1) Äthylester d. *p*-Nitrofuran-2-Carbonsäure (*C. r.* 137, 520 *C.* 1903 [2] 1069).
- $C_7H_7O_6N_3$  13) 3,5-Dinitro-2-Amido-4-Oxy-Methylbenzol. Sm. 141—142° (*J. pr.* [2] 67, 552 *C.* 1903 [2] 240).  
 14) Methyläther d. 3,5-Dinitro-2-Amido-1-Oxybenzol. Sm. 174° (*R.* 23, 113 *C.* 1904 [2] 205).  
 15) Methyläther d. 4,6-Dinitro-3-Amido-1-Oxybenzol. Sm. 156° (*R.* 23, 121 *C.* 1904 [2] 206).
- $C_7H_7NBr_2$  \*10) 3,5-Dibrom-4-Amido-1-Methylbenzol. Sm. 73° (*C.* 1903 [2] 1052).  
 13) 2,4-Dibrom-1-Methylamidobenzol. Sm. 48°. ( $HBr$ ,  $Br_2$ ) (*B.* 37, 2345 *C.* 1904 [2] 433).
- $C_7H_7NS$  \*1) Amid d. Benzolthiocarbonsäure (*C. r.* 136, 556 *C.* 1903 [1] 816).  
 \*2) Phenylamid d. Thioameisensäure. Sm. 138° (*B.* 37, 3714 *C.* 1904 [2] 1449).  
 3) Thioformimidophenyläther.  $HCl$  (*B.* 36, 3468 *C.* 1903 [2] 1244).
- $C_7H_7NSe$  \*1) Amid d. Benzolselenearbonsäure. Sm. 115° (*B.* 37, 2551 *C.* 1904 [2] 520).
- $C_7H_7N_3Cl$  4) 3-Methyldiazobenzolchlorid (*A.* 325, 302 *C.* 1903 [1] 704).
- $C_7H_7Cl_3J$  4) 3-Jod-1-Methylbenzoldichlorid. Zers. bei 104° (*A.* 327, 269 *C.* 1903 [2] 350).
- $C_7H_7JF_2$  1) 4-Methylbenzoldiodidfluorid. Sm. 112° (*A.* 328, 137 *C.* 1903 [2] 990).
- $C_7H_7ON_2$  \*4) Methylnitrosamidobenzol. *Sd.* 120,9—121,5° (*B.* 36, 2477 *C.* 1903 [2] 559).

- $C_7H_8ON_2$  \*7) 2-Amidobenzaldoxim (*B.* 36, 803 *C.* 1903 [1] 977).  
 \*14) 4-Methyl diazobenzol. Sulfat (*Am.* 31, 24 *C.* 1904 [1] 440).  
 \*23) Amid d. 4-Amidobenzol-1-Carbonsäure. Sm. 178—179° (*C.* 1903 [2] 113).  
 \*25) Hydrazid d. Benzolcarbonsäure (*J. pr.* [2] 69, 154 *C.* 1904 [1] 1274).  
 \*26) s-Formylphenylhydrazin. Sm. 145° (*C.* 1903 [1] 829).
- $C_7H_8O_2N_2$  \*1) Methylnitramidobenzol (*B.* 36, 2505 *C.* 1903 [2] 489).  
 \*3) 3-Nitro-1-Methylamidobenzol (*A.* 327, 112 *C.* 1903 [1] 1213).  
 \*11) 4-Nitro-2-Amido-1-Methylbenzol. Sm. 107° (*C.* 1903 [2] 1051).  
 \*12) 5-Nitro-2-Amido-1-Methylbenzol. Sm. 128° (*C.* 1903 [2] 1051).  
 \*13) 6-Nitro-2-Amido-1-Methylbenzol. Sm. 91,5° (92°) (*C.* 1903 [2] 1051; *B.* 37, 1018 *C.* 1904 [1] 1202).  
 \*19) 3-Nitro-4-Amido-1-Methylbenzol. Sm. 117°. d-Camphersulfonat (*C.* 1903 [1] 1338; 1903 [2] 1051).  
 \*22)  $\delta$ -Dicyanacetylaceton (2,3-Diimido-1,1-Diacetyl-R-Trimethylen?). Sm. 162° (*A.* 332, 147 *C.* 1904 [2] 191).  
 \*24) 4-Methylphenylnitrosohydroxylamin (*G.* 33 [2] 243 *C.* 1904 [1] 24).  
 \*40) 2,4-Diamidobenzol-1-Carbonsäure. Sm. 140°. 2HCl (*B.* 36, 1803 *C.* 1903 [2] 283).  
 \*42) 3,4-Diamidobenzol-1-Carbonsäure. Sm. 210—211° (*B.* 36, 4032 *C.* 1904 [1] 294).  
 \*51) Nitril d.  $\alpha$ -Imido- $\gamma$ -Keto- $\beta$ -Aethanoylbutan- $\alpha$ -Carbonsäure ( $\alpha$ -Dicyanacetylaceton) (*A.* 332, 146 *C.* 1904 [2] 191).  
 \*52) Hydrazid d. 2-Oxybenzol-1-Carbonsäure. Sm. 147° (*C.* 1904 [2] 1493).  
 \*63) 2-Hydroxylamidobenzaldoxim (*B.* 36, 3656 *C.* 1903 [2] 1332).  
 68)  $\beta$ -Dicyanacetylaceton. Sm. 227° (*A.* 332, 146 *C.* 1904 [2] 191).  
 69)  $\gamma$ -Dicyanacetylaceton. Sm. 211° (*A.* 332, 146 *C.* 1904 [2] 191).
- $C_7H_8O_2N_4$  \*4) Theophyllin (D.R.P. 138444 *C.* 1903 [1] 370; D.R.P. 151133 *C.* 1904 [1] 1430).  
 \*7) Theobromin (*C.* 1903 [1] 237; D.R.P. 151133 *C.* 1904 [1] 1430).
- $C_7H_8O_2S$  \*2) 1-Methylbenzol-4-Sulfinsäure. m-Toluidinsalz (*J. pr.* [2] 68, 289 *C.* 1903 [2] 995).
- $C_7H_8O_3N_2$  \*27) 5-Acetyl-4-Methylpyrazol-3-Carbonsäure + H<sub>2</sub>O. Sm. 235° (wasserfrei) (*A.* 325, 182 *C.* 1903 [1] 646).  
 31) 2-Nitro-6-Amido-3-Oxy-1-Methylbenzol. Sm. 190° u. Zers. (*Soc.* 85, 527 *C.* 1904 [1] 1256, 1490).  
 32) 5-Nitro-3-Amido-4-Oxy-1-Methylbenzol (D.R.P. 139213 *C.* 1903 [1] 679).  
 33) 3-Acetyl-4-Methylpyrazol-5-Carbonsäure. Sm. 233° (*B.* 36, 1131 *C.* 1903 [1] 1139).  
 34) Methylderivat d.  $\alpha$ -Imido- $\gamma$ -Ketobutan- $\alpha$ - $\beta$ -Dicarbonsäureimid. Sm. 226—227° (*A.* 332, 136 *C.* 1904 [2] 190).
- $C_7H_8O_3N_4$  14) 6-Semicarbazidopyridin-3-Carbonsäure. Sm. 277—278°. HCl (*B.* 36, 1114 *C.* 1903 [1] 1184).
- $C_7H_8O_3S$  \*1) 1-Methylbenzol-2-Sulfonsäure (D.R.P. 137935 *C.* 1903 [1] 108).  
 \*5) Methylester d. Benzolsulfonsäure. Sd. 154°<sub>20</sub> (*M.* 23, 1096 *C.* 1903 [1] 396).
- $C_7H_8O_3S_2$  2) 4-Oxybenzoldimethyläther-1-Thiolsulfonsäure. p-Phenylendiaminsalz (*J. pr.* [2] 70, 391 *C.* 1904 [2] 1721).
- $C_7H_8O_4N_2$  10) 2,4-Diketo-1,3-Diacetyltetrahydroimidazol. Sm. 104—105° (*A.* 333, 129 *C.* 1904 [2] 895).  
 11) Monoäthylester d.  $\beta$ -Cyan- $\beta$ -Imidoäthan- $\alpha\alpha$ -Dicarbonsäure. Sm. 238° (*A.* 332, 119 *C.* 1904 [2] 189).  
 12) Hydrazid d. 3,4,5-Trioxybenzol-1-Carbonsäure. Zers. bei 295—298° (*C.* 1904 [2] 1494).
- $C_7H_8O_4N_4$  7) 2,4-Dinitro-3,5-Diamido-1-Methylbenzol. Sm. 199° (*R.* 23, 126 *C.* 1904 [2] 200).
- $C_7H_8O_4S$  \*7) 4-Oxy-1-Methylbenzol-3-Sulfonsäure. K + H<sub>2</sub>O (*Am.* 31, 34 *C.* 1904 [1] 441).
- $C_7H_8O_4S_2$  1) 1-Methylbenzol-2,4-Disulfinsäure. Fl. Na<sub>2</sub>, K<sub>2</sub>, Ba, Zn (*J. pr.* [2] 68, 332 *C.* 1903 [2] 1172).

- $C_7H_8O_5N_2$  2) Dimethylester d. 4-Oxypyrazol-3,5-Dicarbonsäure. Sm. 232° (*A.* 335, 107 *C.* 1904 [2] 1232).
- $C_7H_8O_5S$  \*2) 1,2-Dioxybenzol-1-Methyläther-3-Sulfonsäure (*Bl.* [3] 29, 365 *C.* 1904 [1] 365).
- 6) 1,2-Dioxybenzol-1-Methyläther-4-Sulfonsäure. Sm. noch nicht bei 270° (*C.* 1900 [2] 459; *M.* 25, 810 *C.* 1904 [2] 1119).
- $C_7H_5NCl$  \*9) 6-Chlor-2-Amido-1-Methylbenzol. Sd. 245°<sub>780</sub> (*B.* 37, 1019 *C.* 1904 [1] 1202).
- \*16) 3-Chlor-4-Amido-1-Methylbenzol. d-Campfersulfonat, d-Bromcamphersulfonat (*C.* 1903 [1] 1338).
- 21) Pyridoniumchlorid +  $H_2O$  (aus 2- $\beta$ -Bromäthylpyridin). 2 +  $PtCl_4$  (*B.* 37, 166 *C.* 1904 [1] 672).
- $C_7H_5NBr$  15) 6-Brom-2-Amido-1-Methylbenzol. Sd. 253—255°.  $H_2SO_4$  (*B.* 37, 1022 *C.* 1904 [1] 1203).
- 16) 2-[ $\beta$ -Bromäthyl]pyridin. Fl. (2HCl,  $PtCl_4$ ), Pikrat (*B.* 37, 165 *C.* 1904 [1] 672).
- 17) Pyridoniumbromid +  $H_2O$  (aus 2- $\beta$ -Bromäthylpyridin). Sm. 226—227° (*B.* 37, 165 *C.* 1904 [1] 672).
- $C_7H_5NJ$  5) 6-Jod-2-Amido-1-Methylbenzol. Fl. HCl (*B.* 37, 1024 *C.* 1904 [1] 1203).
- 6) 2-[ $\beta$ -Jodäthyl]pyridin. (2HCl,  $PtCl_4$ ), Pikrat (*B.* 35, 1345; *B.* 37, 161 *C.* 1904 [1] 672).
- 7) Pyridoniumjodid (aus 2- $\beta$ -Jodäthylpyridin). Sm. 211—213° (*B.* 37, 162 *C.* 1904 [1] 672).
- $C_7H_5N_2Cl_2$  3) 2,6-Dichlor-4-Methyl-5-Aethyl-1,3-Diazin. Sm. 39°; Sd. 255° (*B.* 36, 1917 *C.* 1903 [2] 208).
- $C_7H_5N_2S$  \*2) Amid d. 3-Amidobenzol-1-Thiocarbonsäure. Sm. 139° (*B.* 35, 3934 *C.* 1903 [1] 38).
- \*3) Amid d. 4-Amidobenzol-1-Thiocarbonsäure. Sm. 172° (*C.* 1903 [2] 113).
- 4) Amid d. 2-Amidobenzol-1-Thiocarbonsäure. Sm. 121—122° (*C.* 1903 [1] 1270).
- $C_7H_5N_4S$  2) Phenylazothioharnstoff. Sm. 110—111° u. Zers. (*B.* 37, 2380 *C.* 1904 [2] 322).
- $C_7H_5ON$  \*1) 2-Amido-1-Oxymethylbenzol. Sm. 83°. (2HCl,  $PtCl_4$ ) (*M.* 23, 983 *C.* 1903 [1] 288; *C. r.* 136, 371 *C.* 1903 [1] 635; *B.* 37, 2260 *C.* 1904 [2] 212).
- \*3) 4-Amido-1-Oxymethylbenzol (D.R.P. 83544; *M.* 23, 977 *C.* 1903 [1] 288).
- \*7) 6-Amido-2-Oxy-1-Methylbenzol. Sm. 129° (*B.* 37, 1021 *C.* 1904 [1] 1203).
- \*18) Methyläther d. 4-Amido-1-Oxybenzol. (2HCl,  $PtCl_4$ ) (*B.* 36, 2966 *C.* 1903 [2] 1007).
- \*33) 2-[ $\beta$ -Oxyäthyl]pyridin (*B.* 37, 161 *C.* 1904 [1] 672).
- \*39) 4-Keto-2,6-Dimethyl-1,4-Dihydropyridin (Lutidon).  $\frac{1}{2}HCl$ ,  $HBr$ ,  $\frac{1}{2}HJ$ , ( $HJ$ ,  $J_2$ ) (*C.* 1903 [1] 167; *J. pr.* [2] 67, 45 *C.* 1903 [1] 723).
- $C_7H_5ON_3$  \*10) Hydrazid d. Phenylamidoameisensäure. Sm. 122° (*J. pr.* [2] 70, 244 *C.* 1904 [2] 1463).
- \*11) Hydrazid d. 2-Amidobenzol-1-Carbonsäure. Sm. 123°. 2HCl (*J. pr.* [2] 69, 92 *C.* 1904 [1] 729).
- 18)  $\alpha$ -Amido- $\alpha$ -Phenylharnstoff. Sm. 118—119°. HCl (*B.* 36, 1359 *C.* 1903 [1] 1340).
- 19) Inn. Anhydrid d. 2-Semicarbazol-1-Oxymethylen-R-Pentamethylen. Sm. 175—177° (*A.* 329, 115 *C.* 1903 [2] 1322).
- $C_7H_5O_2N$  \*1) 4-Amido-3,5-Dioxy-1-Methylbenzol ( $\alpha$ -Amidoorcin). HCl (*B.* 36, 888 *C.* 1903 [1] 965).
- \*2) 1-Methyläther d. 3-Amido-1,2-Dioxybenzol. Sm. 127° (*B.* 36, 2257 *C.* 1903 [2] 428).
- \*32) 5-Amido-2-Oxy-1-Oxymethylbenzol. Sm. 135—142° (D.R.P. 148977 *C.* 1904 [1] 699; D.R.P. 149123 *C.* 1904 [1] 701).
- 36) 2-Amido-3,5-Dioxy-1-Methylbenzol ( $\beta$ -Amidoorcin). HCl,  $H_2SO_4$ , Pikrat +  $H_2O$ , Oxalat, Ferrocyanat (*B.* 36, 888 *C.* 1903 [1] 965; *B.* 37, 1420 *C.* 1904 [1] 1417; *B.* 37, 1425 *C.* 1904 [1] 1418).

- $C_7H_5O_2N$  37) 3-Amido-4-Oxy-1-Oxymethylbenzol. Sm. 112—114° (D.R.P. 148977 *C.* 1904 [1] 700; D.R.P. 149123 *C.* 1904 [1] 701).  
 38) 2-Hydroxylamido-1-Oxymethylbenzol. Sm. 104,2—104,7° (*B.* 36, 836 *C.* 1903 [1] 1028).  
 39) 4-Methyläther d. 4-Oxyphenylhydroxylamin. Sm. 98° (*B.* 37, 43 *C.* 1904 [1] 654).
- $C_7H_5O_2N_3$  15) 4-Acetylamido-2-Keto-5-Methyl-1,2-Dihydro-1,3-Diazin. Zers. bei 250° (*Am.* 31, 602 *C.* 1904 [2] 242).
- $C_7H_5O_2Cl$  \*1) 2,6-Dimethyl-1,4-Pyronhydrochlorid. Sm. 152—154° (*B.* 36, 1478 *C.* 1903 [1] 1349).
- $C_7H_5O_3N$  \*4) Aethylester d. Acetylcyanessigsäure. Sm. 26° (*B.* 37, 3386 *C.* 1904 [2] 1220).  
 13) 1-Methyläther d. 2-Amido-1,3,5-Trioxymethylbenzol. HCl (*M.* 23, 951 *C.* 1903 [1] 285).  
 14) Methylester d.  $\alpha$ -Cyan- $\beta$ -Oxypropenmethyläther- $\alpha$ -Carbonsäure. Sm. 96—97° (*Bl.* [3] 31, 341 *C.* 1904 [1] 1135).  
 15) Aethylester d.  $\beta$ -Amidofuran-2-Carbonsäure. Sm. 95° (*C. r.* 136, 1454 *C.* 1903 [2] 292).
- $C_7H_5O_3Cl$  3) 2-Chlormethyl-5-Methyl-2,3-Dihydrofuran-4-Carbonsäure. Sm. 108—109° (*C. r.* 137, 14 *C.* 1903 [2] 508).
- $C_7H_5O_3P$  \*5)  $\alpha$ -Oxybenzylunterphosphorigesäure. Sm. 108° (*C.* 1904 [2] 1709).
- $C_7H_5O_4N$  6) Verbindung +  $H_2O$  (aus 2,5-Dimethyl-1,4-Pyron-3,4-Dicarbonsäurediäthylester). Sm. 166°. Ag (*C.* 1902 [2] 647; *G.* 34 [1] 458 *C.* 1904 [2] 537).  
 \*2)  $\alpha$ -Oxybenzylphosphinsäure. Sm. 195°.  $Ag_2$  (*C. r.* 135, 1118 *C.* 1903 [1] 235).
- $C_7H_5O_6N$  2)  $\alpha$ -Aethylester d.  $\beta$ -Imidoäthan- $\alpha\alpha\beta$ -Tricarbonsäure. Sm. 134°. Na (*A.* 332, 120 *C.* 1904 [2] 189).  
 C 36,4 — H 3,9 — O 41,5 — N 18,2 — M. G. 231.
- $C_7H_5O_6N_3$  1)  $\alpha\gamma$ -Diacetat d.  $\beta$ -Nitro- $\alpha\gamma$ -Dioximidopropan. Sm. 64—66°. Na (*Am.* 29, 264 *C.* 1903 [1] 957).
- $C_7H_5N_3S$  \*1) Phenylamidothioharnstoff. Sm. 201° (*J. pr.* [2] 67, 217 *C.* 1903 [1] 1260).  
 3) 2-Amidophenylthioharnstoff. Sm. 167°. HCl,  $H_2SO_4$  (*Ar.* 241, 165 *C.* 1903 [2] 109).  
 4) 3-Amidophenylthioharnstoff. Sm. 170°. HCl,  $H_2SO_4$  (*Ar.* 241, 164 *C.* 1903 [2] 109).  
 5) 4-Amidophenylthioharnstoff. Sm. 190°. HCl,  $H_2SO_4$  (*Ar.* 241, 162 *C.* 1903 [2] 109).
- $C_7H_{10}O_2N_2$  \*5) Trimethyluracil (*A.* 327, 259 *C.* 1903 [2] 349).  
 22) 2,4-Diamido-3,5-Dioxy-1-Methylbenzol. 2HCl (*B.* 37, 1411 *C.* 1904 [1] 1416).  
 23) 2,6-Diamido-3,5-Dioxy-1-Methylbenzol. 2HCl (*B.* 37, 1413 *C.* 1904 [1] 1417).  
 24) 2,6-Dioxy-4-Methyl-5-Aethyl-1,3-Diazin. Sm. 238° (*B.* 36, 1916 *C.* 1903 [2] 208).  
 25) 2-Aethyläther d. 2,6-Dioxy-4-Methyl-1,3-Diazin. Sm. 206°. HCl, (2HCl,  $PtCl_4$ ) (*C.* 1904 [2] 30).  
 26) 2,4-Diketo-6-Methyl-5-Aethyl-1,2,3,4-Tetrahydro-1,3-Diazin. Sm. 237° (*Am.* 29, 490 *C.* 1903 [1] 1309).  
 27) Methylester d.  $\alpha$ -Cyan- $\beta$ -Methylamidopropen- $\alpha$ -Carbonsäure. Sm. 123° (*Bl.* [3] 31, 341 *C.* 1904 [1] 1135).  
 28) Nitril d.  $\alpha$ -Oxyessig- $[\beta$ -Cyan- $\alpha$ -Aethoxyläthyl]äthersäure. Sm. 181°; Sd. 208°<sub>25</sub> (*C.* 1904 [1] 159).  
 29) Verbindung (aus d. Säure  $C_8H_{10}O_4N_2$ ) =  $(C_7H_{10}O_2N_2)_x$  (*C.* 1904 [1] 159).
- $C_7H_{10}O_3Br_2$  5) 3,4-Dibromhexahydrobenzol-1-Carbonsäure. Sm. 86° (*Soc.* 85, 433 *C.* 1904 [1] 1082, 1440).  
 6) Laktone d.  $\gamma\delta$ -Dibrom- $\beta$ -Oxymethyl- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 152° u. Zers. (*M.* 25, 15 *C.* 1904 [1] 718).
- $C_7H_{10}O_6N_2$  14) 2,4,6-Triketo-5-Propylhexahydro-1,3-Diazin. Sm. 208° (*A.* 335, 358 *C.* 1904 [2] 1382).  
 15) 2,4,6-Triketo-5-Isopropylhexahydro-1,3-Diazin. Sm. 216° (*A.* 335, 358 *C.* 1904 [2] 1382).

- $C_7H_{10}O_3N_2$  16) 2,4,6-Triketo-5-Methyl-5-Aethylhexahydro-1,3-Diazin (Methyläthylbarbitursäure). Sm. 212° (D.R.P. 144432 *C.* 1903 [2] 778; D.R.P. 146496 *C.* 1903 [2] 1484; A. 335, 343 *C.* 1904 [2] 1381).
- 17) Trimethyläther d. 2,4,6-Trioxo-1,3-Diazin. Sm. 53°; Sd. 232° (*B.* 36, 2235 *C.* 1903 [2] 449).
- 18) Aethylester d. 5-Keto-3-Methyl-4,5-Dihydropyrazol-1-Carbonsäure. Sm. 202°.  $NH_4$ , Ag (P. GUTMANN, Dissert., Heidelberg 1903).
- 19) Aethylester d. 5-Keto-3-Methyl-4,5-Dihydropyrazol-4-Carbonsäure. Sm. 196° (P. GUTMANN, Dissert., Heidelberg 1903).
- 20) Aethylester d. 3-Keto-5-Methyl-2,3-Dihydropyrazol-2-Carbonsäure. Sm. 202° (P. GUTMANN, Dissert., Heidelberg 1903).
- $C_7H_{10}O_3N_4$  \*2) 5-Formylamido-6-Amido-2,4-Diketo-1,3-Dimethyl-1,2,3,4-Tetrahydro-1,3-Diazin (D.R.P. 148208 *C.* 1904 [1] 618).
- $C_7H_{10}O_4N_2$  10) 4-Oxy-2,5-Diketo-4-Acetyl-1,3-Dimethyltetrahydroimidazol (Acetyldimethylallantursäure). Fl. (A. 327, 266 *C.* 1903 [2] 349).
- $C_7H_{10}O_4Br_2$  15) cis- $\gamma\delta$ -Dibrom- $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm. 149—151° (*Soc.* 83, 16 *C.* 1903 [1] 76, 443).
- 16) trans- $\gamma\delta$ -Dibrom- $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm. 215—217° (*Soc.* 83, 18 *C.* 1903 [1] 76, 443).
- $C_7H_{10}NCl$  \*4) Chlormethylat d. 2-Methylpyridin. 2 +  $PtCl_4$  (*Soc.* 83, 1415 *C.* 1904 [1] 439).
- $C_7H_{10}N_2S$  1) Methyläther d. 2-Merkapto-4,6-Dimethyl-1,3-Diazin. Sm. 23—24°; Sd. 144°<sub>33</sub> (*Am.* 32, 356 *C.* 1904 [2] 1415).
- $C_7H_{10}N_2S_2$  2) 2,6-Dimerkapto-4-Methyl-5-Aethyl-1,3-Diazin. Zers. bei 250° (*B.* 36, 1923 *C.* 1903 [2] 209).
- $C_7H_{10}N_3Cl$  1) 6-Chlor-2-Amido-4-Methyl-5-Aethyl-1,3-Diazin. Sm. 156°. Pikrat (*B.* 36, 1918 *C.* 1903 [2] 208).
- 2) 2-Chlor-6-Amido-4-Methyl-5-Aethyl-1,3-Diazin. Sm. 220° (*B.* 36, 1922 *C.* 1903 [2] 209).
- $C_7H_{11}ON$  14) 3-Oximido-1-Methyl-2-Tetrahydrobenzol. Sd. 113—115°<sub>11</sub> (*C.* 1903 [1] 329).
- 15) lab. 4-Oximido-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 40—42°; Sd. 115—117°<sub>11</sub> (A. 329, 372 *C.* 1904 [1] 517).
- 16) stab. 4-Oximido-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 62—63° (A. 329, 373 *C.* 1904 [1] 517).
- 17) 3-Methyl-5-Propylisoxazol (oder 5-Methyl-3-Propylisoxazol). Sd. 70 bis 76°<sub>20</sub> (*Bl.* [3] 27, 1087 *C.* 1903 [1] 226).
- 18) Methylhydroxyd d. 2-Methylpyridin. d-Camphersulfonat (*Soc.* 83, 1415 *C.* 1904 [1] 438).
- $C_7H_{11}ON_3$  5) Anhydrodipropionylguanidin. Sm. 159—160°. (2HCl,  $PtCl_4$ ) (*Ar.* 241, 469 *C.* 1903 [2] 988).
- 6) 2-Amido-6-Oxy-4-Methyl-5-Aethyl-1,3-Diazin. Zers. bei 285° (*B.* 36, 1915 *C.* 1903 [2] 208).
- 7) Semicarbazonanhydrid d. Keton  $C_6H_{10}O_2$ . Sm. 116° (*C. r.* 137, 1205 *C.* 1904 [1] 356).
- 8) isom. Semicarbazonanhydrid d. Keton  $C_6H_{10}O_2$ . Sm. 280° u. Zers. (*C. r.* 137, 1295 *C.* 1904 [1] 356).
- $C_7H_{11}OCl$  4) 4-Chlor-3-Keto-1-Methylhexahydrobenzol. Sd. 110—111°<sub>40</sub> (*C.* 1903 [2] 289; 1904 [1] 1346; 1904 [2] 220).
- $C_7H_{11}O_2N$  \*18) Imid d. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 173—175° (*Soc.* 83, 358 *C.* 1903 [1] 1122).
- 29) Imid d. cis- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 108° (*Bl.* [3] 29, 333 *C.* 1903 [1] 1216).
- 30) Imid d.  $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 113°. Ag (*Soc.* 83, 356 *C.* 1903 [1] 389, 1122).
- 31) Verbindung (aus Methylamin u. 1,2-Dioxybenzol). Sm. 98° (D.R.P. 141101 *C.* 1903 [1] 1058).
- 32) Verbindung (aus Methylamin u. 1,4-Dioxybenzol). Sm. 110° (D.R.P. 141101 *C.* 1903 [1] 1058).
- $C_7H_{11}O_2N_3$  \*7) Amid d. 5-Keto-3-Propyl-4,5-Dihydropyrazol-1-Carbonsäure. Sm. 189° (*Bl.* [3] 27, 1092 *C.* 1903 [1] 226).
- 8) Aethyläther d. 1-Nitroso-5-Oxy-3,4-Dimethylpyrazol. Sm. 34° (*B.* 37, 2833 *C.* 1904 [2] 642).
- 9) Methyl ester d. Histidin. Fl. 2HCl (*H.* 42, 515 *C.* 1904 [2] 1290).

- $C_7H_{11}O_2Br$  5) 3-Bromhexahydrobenzol-1-Carbonsäure. Sm. 122° (*Soc.* 85, 432 *C.* 1904 [1] 1082, 1440).  
 6) trans-4-Bromhexahydrobenzol-1-Carbonsäure. Sm. 167° (*Soc.* 85, 431 *C.* 1904 [1] 1082, 1439).  
 7) Laktone d.  $\gamma$ -Brom- $\delta$ -Oxy- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 82 bis 83° (*Soc.* 85, 159 *C.* 1904 [1] 720).
- $C_7H_{11}O_3N$  \*9)  $\gamma$ -Ecgoninsäure. Sm. 93–94°. Cu + 2 1/2 H<sub>2</sub>O, Ag, HCl (*A.* 326, 83 *C.* 1903 [1] 842).  
 10) 4-Oximidohexahydrobenzol-1-Carbonsäure. Sm. 147° (*Soc.* 85, 427 *C.* 1904 [1] 1439).  
 11) Aethylester d.  $\beta$ -Cyan- $\beta$ -Oxybuttersäure (D.R.P. 141509 *C.* 1903 [1] 1244).  
 $C_7H_{11}O_3N_5$  C 39,4 — H 5,2 — O 22,5 — N 32,9 — M. G. 213.  
 1) Aethylester d. 1-Ureido-5-Methyl-1,2,3-Triazol-4-Carbonsäure. Sm. 201° (*A.* 325, 161 *C.* 1903 [1] 645).
- $C_7H_{11}O_4J$  1)  $\gamma$ -Jod- $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm. 168° u. Zers. (*C. r.* 136, 1463 *C.* 1903 [2] 282).
- $C_7H_{11}O_5N$  \*4) Diäthylester d. Oximidomethandicarbonsäure. Sm. 172<sub>12</sub>. Na (*C. r.* 137, 197 *C.* 1903 [2] 658).  
 \*5) Diäthylester d. Stickstoffcarbonsäureketocarbonsäure (Carboxäthyl-oxanäthan). Sm. 47; Sd. 143–144° (*B.* 37, 3680 *C.* 1904 [2] 1495).
- $C_7H_{11}O_6N$  \*1) Diäthylester d. Nitromalonsäure. NH<sub>4</sub> (*C.* 1903 [2] 343; *B.* 37, 1784 *C.* 1904 [1] 1483; *M.* 25, 702 *C.* 1904 [2] 1109).  
 2) Dimethyläthylester d. Stickstofftricarbonsäure. Sd. 127–137°<sub>10</sub> (*B.* 37, 3675 *C.* 1904 [2] 1495).
- $C_7H_{11}O_6N_3$  \*1) Semicarbazone d. d-Glykuronsäurelaktone. Sm. 188–189° (202 bis 206°?) (*H.* 41, 245 *C.* 1904 [1] 1095; *H.* 41, 548 *C.* 1904 [2] 422).  
 2) Carboxylamidoacetylamidoacetylamidoessigsäure (Diglycylglycincarbonsäure). Sm. 210 u. Zers. (*B.* 36, 2101 *C.* 1903 [1] 1304).
- $C_7H_{11}N_3S$  4) 2-Amido-6-Merkapto-4-Methyl-5-Aethyl-1,3-Diazin. Sm. 230–245° (*B.* 36, 1921 *C.* 1903 [2] 209).  
 5) Aethyläther d. 4-Amido-2-Merkapto-5-Methyl-1,3-Diazin. Sm. 96 bis 97° (*Am.* 31, 597 *C.* 1904 [2] 242).
- $C_7H_{12}ON_2$  \*8) Amid d.  $\delta$ -Cyan- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 104–104,5°; Sd. 275–280°<sub>745</sub> (*C.* 1903 [2] 192).  
 \*10) 5-Keto-3-Isobutyl-4,5-Dihydropyrazol. Sm. 239° (*Bl.* [3] 27, 1093 *C.* 1903 [1] 226).  
 \*11) 5-Keto-4-Methyl-3-Propyl-4,5-Dihydropyrazol. Sm. 184° (*Bl.* [3] 27, 1102 *C.* 1903 [1] 227).  
 \*12) Amid d.  $\alpha$ -Cyanpentan- $\alpha$ -Carbonsäure. Sm. 125,5–126,5° (*A.* 325, 221 *C.* 1903 [1] 439).  
 13) Aethyläther d. 5-Oxy-3,4-Dimethylpyrazol. Sm. 93° (*B.* 37, 2832 *C.* 1904 [2] 642).  
 14) 5-Keto-3-Methyl-4-Propyl-4,5-Dihydropyrazol. Sm. 212–213° (*Bl.* [3] 31, 761 *C.* 1904 [2] 343).
- $C_7H_{12}O_2N_2$  13) Monoacetylhydrazon d.  $\beta\gamma$ -Diketopentan. Sm. 130° (*B.* 36, 3185 *C.* 1903 [2] 939).  
 14)  $\gamma$ -Methylacetylhydrazon- $\beta$ -Ketobutan. Sm. 43° (*B.* 36, 3188 *C.* 1903 [2] 939).
- $C_7H_{12}O_2N_4$  6) Amid d. 5-Methylenhexahydro-1,3-Diazin-4,6-Dicarbonsäure. Subl. bei 170°. Hg, Ag, HCl, HJ (*G.* 33 [1] 381 *C.* 1903 [2] 579).  
 $C_7H_{12}O_2N_8$  C 35,0 — H 5,0 — O 13,3 — N 46,7 — M. G. 240.  
 1) 1-Ureido-4-[ $\alpha$ -Semicarbazoneäthyl]-5-Methyl-1,2,3-Triazol. Sm. 268° u. Zers. (*A.* 325, 162 *C.* 1903 [1] 645).
- $C_7H_{12}O_3N_2$  8) Verbindung (aus Zimmtsäureäthylester). Sm. 114–115° (*B.* 36, 4310 *C.* 1904 [1] 448).
- $C_7H_{12}O_4N_2$  \*4) Nitrosat d. 5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 107–108° (*A.* 329, 370 *C.* 1904 [1] 516).  
 5) Nitrosat d. 1-Methyl-P-Tetrahydrobenzol. Sm. 103–104° (*C.* 1903 [1] 329).
- $C_7H_{12}O_5N_4$  C 36,2 — H 5,2 — O 34,5 — N 24,1 — M. G. 232.  
 1) Amid d. Carboxylamidoacetylamidoacetylamidoessigsäure (Diglycylglycinamidcarbonsäure). Sm. 230–234° u. Zers. (*B.* 36, 2102 *C.* 1903 [1] 1304).

- $C_7H_{13}ON$  \*5) 2-Oximido-1-Methylhexahydrobenzol. Sm. 43—44° (A. 329, 376 C. 1904 [1] 517).
- \*6) d-3-Oximido-1-Methylhexahydrobenzol. Sm. 43—44° (A. 332, 338 C. 1904 [2] 653).
- $C_7H_{13}ON_3$  \*2) 2-Semicarbazon-1-Methyl-R-Pentamethylen. Sd. 174—176° (A. 331, 322 C. 1904 [1] 1567).
- \*8) Verbindung (aus Mesityloxyd). Sm. 129° (B. 36, 4379 C. 1904 [1] 454).
- $C_7H_{13}OCl$  9) 4-Chlor-3-Oxy-1-Methylhexahydrobenzol. Sd. 205—206°<sub>758</sub> (C. 1903 [2] 289; 1904 [1] 1346).
- $C_7H_{13}OJ$  2) Methyläther d. 2-Jod-1-Oxyhexahydrobenzol. Sd. 114°<sub>49</sub> (C. r. 135, 1056 C. 1903 [1] 233).
- $C_7H_{13}O_2N$  \*28) Aethylester d. Tetrahydropyrrol-2-Carbonsäure. Sd. 85°<sub>23</sub> (A. 326, 108 C. 1903 [1] 842).
- \*29)  $\gamma$ -Oximido- $\delta$ -Ketoheptan. Sd. 107—108°<sub>10</sub> (Bl. [3] 31, 1165 C. 1904 [2] 1700).
- \*31) 2-Hexahydropyridyllessigsäure. Sm. 214°. HCl, (HCl, AuCl<sub>3</sub>) (B. 36, 2905 C. 1903 [2] 889).
- 33) 2-Methyl-2-Acetonyltetrahydrooxazol. Sm. 73° (B. 36, 1282 C. 1903 [1] 1216).
- 34) Gem. Imid d. Propionsäure u. Buttersäure. Sm. 109° (C. r. 137, 326 C. 1903 [2] 712).
- 35) Gem. Imid d. Propionsäure u. Isobuttersäure. Sm. 140° (C. r. 137, 326 C. 1903 [2] 712).
- $C_7H_{13}O_3N_3$  4) Dipropionylguanidin. Sm. 85—86° (Ar. 241, 470 C. 1903 [2] 988).
- $C_7H_{13}O_3Br$  \*17) Aethylester d.  $\alpha$ -Brom- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sd. 89—90°<sub>26</sub> (Bl. [3] 31, 158 C. 1904 [1] 869).
- 18) Aethylester d.  $\beta$ -Brombutan- $\beta$ -Carbonsäure. Sd. 75°<sub>18</sub> (Bl. [3] 31, 319 C. 1904 [1] 1133).
- $C_7H_{13}O_3N$  \*2)  $\delta$ -Oximido- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 93—94° (Soc. 85, 1220 C. 1904 [2] 1109).
- \*10) Aethylester d.  $\alpha$ -Oximidoisovaleriansäure. Sm. 56°; Sd. 129°<sub>13</sub> (Bl. [3] 31, 1071 C. 1904 [2] 1457).
- 13)  $\epsilon$ -Oximido- $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. Sm. 163—164° u. Zers. Na, Ag (Bl. [3] 31, 1074 C. 1904 [2] 1458).
- 14) Aethylester d.  $\alpha$ -Oximidovaleriansäure. Sm. 48°; Sd. 144—145°<sub>10</sub> (Bl. [3] 31, 1072 C. 1904 [2] 1457).
- $C_7H_{13}O_3N_3$  8)  $\delta$ -Semicarbazon- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 205° (Bl. [3] 31, 1152 C. 1904 [2] 1707).
- 9) Propylaster d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 178° (Am. 28, 397 C. 1903 [1] 90).
- 10) Isobutylester d. Semicarbazonessigsäure. Sm. 214—215° (Bl. [3] 31, 681 C. 1904 [2] 195).
- $C_7H_{13}O_4N$  \*5) Diäthylester d. Amidomethancarbonsäure-N-Carbonsäure (Carbäthoxylglycinäthylester). Sm. 27—28°; Sd. 135°<sub>16</sub> (B. 36, 2107 C. 1903 [2] 345).
- 8) Aethylester d.  $\alpha$ -Nitrovaleriansäure. Sd. 130°<sub>90</sub> (C. 1904 [2] 1601).
- $C_7H_{13}O_4N_3$  4)  $\alpha$ -Amidopropionylamidoacetylamidoessigsäure. Sm. 214° u. Zers. (B. 36, 2987 C. 1903 [2] 1112).
- $C_7H_{14}ON_2$  \*9)  $\beta$ -Butyrylhydrazonpropan. Sm. 82° (J. pr. [2] 69, 487 C. 1904 [2] 599).
- 11)  $\beta$ -Isobutyrylhydrazonpropan. Sm. 90—91° (J. pr. [2] 69, 498 C. 1904 [2] 600).
- 12) Methylamid d. 1-Methyltetrahydropyrrol-2-Carbonsäure. Sm. 44 bis 46°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (A. 326, 118 C. 1903 [1] 843).
- $C_7H_{14}O_4N_2$  \*2)  $\gamma\delta$ -Dioximidoheptan. Sm. 167—168° (Bl. [3] 31, 1175 C. 1904 [2] 1701).
- \*5)  $\alpha\gamma$ -Di[Acetylamido]propan. Sm. 101° (B. 36, 336 C. 1903 [1] 703).
- 18)  $\alpha\alpha$ -Di[Acetylamido]propan. Sm. 188° (M. 25, 939 C. 1904 [2] 1598).
- 19) Diäthylacetylarnstoff. Sm. 207,5° (C. 1903 [1] 1155; A. 335, 365 C. 1904 [2] 382).
- 20) 3-Nitroso-4,4,6-Trimethyltetrahydro-1,3-Oxazin. Sd. 129—131°<sub>22-24</sub> (M. 25, 830 C. 1904 [2] 1239).
- 21) Ureid d. Diäthyllessigsäure (Diäthylacetylarnstoff). Sm. 207,5° (D.R.P. 144431 C. 1903 [2] 813).

- $C_7H_{14}O_2Cl_2$  2) Aethylpropyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dioxyäthan. *Sd.* 202—204° (*G.* 33 [2] 418 *C.* 1904 [1] 922).
- $C_7H_{14}O_4N_4$  \*1) Aethylester d.  $\alpha\alpha$ -Diureidopropionsäure. *Zers.* bei 200° (*C. r.* 138, 372 *C.* 1904 [1] 791).
- \*9) Diäthylester d. Methylendi[Amidoameisensäure]. *Sm.* 131° (*B.* 36, 2206 *C.* 1903 [2] 423).
- $C_7H_{14}O_5N_2$  C 40,8 — H 6,8 — O 38,8 — N 13,6 — M. G. 206.
- 1)  $\beta$ -Hydroxylamid d. Diäthylhydroxylamin- $\beta\beta$ -Dicarbonsäure- $\beta$ -Methylester. *Sm.* 124° (*B.* 37, 255 *C.* 1904 [1] 642).
- $C_7H_{14}O_6N_2$  \*1) Glykoseureid. *Sm.* 207° u. *Zers.* (*R.* 22, 38 *C.* 1903 [1] 1079).
- $C_7H_{14}NCl$  5) 2-[ $\beta$ -Chloräthyl]hexahydropyridin. *Fl.* HCl, (HCl, AuCl<sub>3</sub>) (*B.* 37, 1886 *C.* 1904 [2] 238).
- $C_7H_{14}NBr$  4) 2-[ $\beta$ -Bromäthyl]hexahydropyridin. *Fl.* HCl, (HCl, AuCl<sub>3</sub>) (*B.* 37, 1884 *C.* 1904 [2] 238).
- $C_7H_{14}NJ$  3) 2-[ $\beta$ -Jodäthyl]hexahydropyridin. *HJ* (*B.* 37, 1886 *C.* 1904 [2] 238).
- $C_7H_{15}ON$  \*6)  $\beta$ -Methylamido- $\delta$ -Keto- $\beta$ -Methylpentan. (2HCl, PtCl<sub>4</sub>) (*M.* 24, 776 *C.* 1904 [1] 158).
- \*15) Amid d. Hexan- $\alpha$ -Carbonsäure. *Sm.* 94,5° (*B.* 36, 2550 *C.* 1903 [2] 654).
- 24) 4, 4, 6-Trimethyltetrahydro-1, 3-Oxazin. *Sd.* 149—152°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*M.* 25, 827 *C.* 1904 [2] 1239).
- 25) Amid d.  $\beta\beta$ -Dimethylbutan- $\delta$ -Carbonsäure. *Sm.* 140—141° (*C. r.* 136, 554 *C.* 1903 [1] 825).
- 26) Diäthylamid d. Propionsäure. *Sd.* 191° (*B.* 36, 2287 *C.* 1903 [2] 563).
- 27) Isoamylamid d. Essigsäure. *Sd.* 230—232° (*Ann.* 29, 311 *C.* 1903 [1] 1166).
- 28) Dipropylamid d. Ameisensäure. *Sd.* 202—204° (*B.* 36, 2287 *C.* 1903 [2] 563; *B.* 36, 2476 *C.* 1903 [2] 559).
- $C_7H_{15}ON_3$  \*3)  $\beta$ -Semicarbazonhexan. *Sm.* 127° (*Bl.* [3] 31, 1157 *C.* 1904 [2] 1707).
- \*5)  $\delta$ -Semicarbazon- $\beta$ -Methylpentan. *Sm.* 132—133° u. *Zers.* (*C.* 1903 [1] 225).
- 6)  $\gamma$ -Semicarbazonmethylpentan. *Sm.* 93—94° (*Bl.* [3] 31, 306 *C.* 1904 [1] 1133).
- $C_7H_{15}O_3N$  \*16) Aethylester d. Isobutylamidoameisensäure. *Sd.* 95—96°<sub>15</sub> (*B.* 36, 2476 *C.* 1903 [2] 559).
- \*34) Betain d. Methyl-diäthylamidoessigsäure. HCl, Pikrat (*B.* 36, 4190 *C.* 1904 [1] 263).
- 42)  $\beta$ -Diäthylamidopropionsäure. *Sm.* 70—71° (*J. pr.* [2] 68, 350 *C.* 1903 [2] 1318).
- 43) Aethylester d. Diäthylamidoameisensäure. *Sd.* 167° (169—172°) (*B.* 36, 2287 *C.* 1903 [2] 563; *B.* 36, 2477 *C.* 1903 [2] 559; *Bl.* [3] 31, 690 *C.* 1904 [2] 198).
- 44) Acetat d. Diäthylamidooxymethan. *Sd.* 81—82°<sub>14,5</sub> (*B.* 37, 4088 *C.* 1904 [2] 1724).
- $C_7H_{15}O_2Br$  2) Diäthyläther d.  $\gamma$ -Brom- $\alpha\alpha$ -Dioxypropan. *Sd.* 80—90°<sub>20</sub> (*A.* 335, 263 *C.* 1904 [2] 1283).
- $C_7H_{15}O_3N$  7)  $\epsilon$ -Oximido- $\alpha\gamma$ -Dioxy- $\beta\beta$ -Dimethylpentan. *Fl.* (*M.* 25, 1066 *C.* 1904 [2] 1599).
- $C_7H_{15}O_3N_3$  3) Aethylester d.  $\alpha$ -Semicarbazidoisobuttersäure. *Sm.* 97° (*Ann.* 28, 402 *C.* 1903 [1] 90).
- 4) Propylester d.  $\alpha$ -Semicarbazidopropionsäure. *Sm.* 89° (*Ann.* 28, 397 *C.* 1903 [1] 90).
- $C_7H_{15}O_5N_3$  C 38,0 — H 6,8 — O 36,2 — N 19,0 — M. G. 221.
- 1) Semicarbazon d. Rhamnose +  $\frac{1}{2}H_2O$ . *Sm.* 183° (*Bl.* [3] 31, 1077 *C.* 1904 [2] 1492; *C.* 1904 [2] 1494).
- $C_7H_{15}O_6N_3$  \*1) Semicarbazon d. d-Glykose + 2H<sub>2</sub>O. *Sm.* 197—198° u. *Zers.* (*Bl.* [3] 31, 1077 *C.* 1904 [2] 1492).
- 2) Semicarbazon d. d-Galaktose. *Sm.* 200—202° (*Zers.* bei 186—189°) (*Bl.* [3] 31, 1078 *C.* 1904 [2] 1493; *C.* 1904 [2] 1494).
- 3) Semicarbazon d. d-Mannose +  $\frac{1}{2}H_2O$ . *Sm.* 117° (wasserfrei) (*Bl.* [3] 31, 1077 *C.* 1904 [2] 1493; *C.* 1904 [2] 1493).
- 4) Verbindung (aus Guanidin). + C<sub>2</sub>H<sub>5</sub>O (*C.* 1904 [2] 1210).
- $C_7H_{15}O_7N$  \*2)  $\alpha$ -2-Amido-d-Glykoheptonsäure (Galaheptosaminsäure) (*B.* 36, 620 *C.* 1903 [1] 766).

- $C_7H_{15}O_7N$  3)  $\beta$ -2-Amido-d-Glykoheptonsäure. Cu (B. 36, 619 C. 1903 [1] 766).  
4) Amidoglykoheptonsäure. Brucinsalz (B. 35, 4018 C. 1903 [1] 391).
- $C_7H_{15}N_2Cl$  \*1) Nitril d. Methyldiäthylchlorammoniumessigsäure. Sm. 186° (B. 37, 4089 C. 1904 [2] 1724).
- $C_7H_{15}N_2J$  \*2) Nitril d. Methyldiäthyljodammoniumessigsäure. Sm. 190—191° (186°) (B. 36, 4189 C. 1904 [1] 262; B. 37, 4089 C. 1904 [2] 1724).
- $C_7H_{15}N_4J$  \*1) Jodmethylat d. Hexamethyltetramin. Sm. 204° (A. 334, 231 C. 1904 [2] 900).
- $C_7H_{15}ON_2$  \*16) Nitril d. Methyldiäthylammoniumhydroxydessigsäure. Jodid, Pikrat (B. 36, 4189 C. 1904 [1] 262).  
17)  $\alpha$ -Äthyl- $\beta$ -[d-sec. Butyl]harnstoff. Sm. 92° (Ar. 242, 70 C. 1904 [1] 999).  
18)  $\delta$ -Oximido- $\beta$ -Methylamido- $\beta$ -Methylpentan. Sm. 57—59°. Oxalat (M. 24, 777 C. 1904 [1] 158).
- $C_7H_{15}ON_4$  C 48,8 — H 9,3 — O 9,3 — N 32,6 — M. G. 172.  
1) Methylhydroxyd d. Hexamethyltetramin. Salze siehe (B. 19, 1843; A. 334, 231 C. 1904 [2] 900). — I, 1168.
- $C_7H_{15}O_2N_2$  2) Äthylester d.  $\gamma$ - $\delta$ -Diamidovaleriansäure. (2HCl, PtCl<sub>4</sub>) (C. 1904 [1] 259).
- $C_7H_{15}O_3S$  \*1) Heptan- $\alpha$ -Sulfonsäure. Ba (C. 1903 [1] 961).
- $C_7H_{15}O_4S$  1) Äthylisoamylester d. Schwefelsäure. Sd. 127—128°<sub>15</sub> (Am. 30, 219 C. 1903 [2] 937).
- $C_7H_{15}O_5N_2$  3) isom.  $\beta\gamma\delta\epsilon\zeta$ -Pentaoxyhexylharnstoff (Mannaminharnstoff). Sm. 97—98° (C. r. 138, 505 C. 1904 [1] 872).
- $C_7H_{15}O_6S_2$  2) Diäthylester d. Propan- $\alpha\gamma$ -Disulfonsäure. Fl. (B. 37, 3808 C. 1904 [2] 1564).
- $C_7H_{15}N_2S$  9)  $\alpha$ -Äthyl- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 67° (Ar. 242, 59 C. 1904 [1] 998).  
10)  $\alpha\alpha$ -Dimethyl- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 54° (Ar. 242, 59 C. 1904 [1] 998).
- $C_7H_{17}ON$  17)  $\beta$ -Methylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. Sd. 184—186°<sub>750</sub>. (2HCl, PtCl<sub>4</sub>) (M. 25, 137 C. 1904 [1] 866).  
18)  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylbutan. Sd. 57°<sub>23</sub> (C. r. 138, 767 C. 1904 [1] 1196).
- $C_7H_{17}ON_3$  C 52,8 — H 10,7 — O 10,1 — N 26,4 — M. G. 159.  
1)  $\alpha$ -Oximido- $\alpha$ -Amido- $\alpha$ -Dipropylamidomethan. Sm. 115°. Pikrat (B. 36, 3661 C. 1903 [2] 1325).
- $C_7H_{17}O_4P$  \*3) Diäthylester d.  $\alpha$ -Oxyisopropylphosphinsäure. Sm. 14—15°; Sd. 145°<sub>20</sub> u. Zers. (C. 1904 [2] 1708).
- $C_7H_{17}ClS$  \*1) Methylpropylsulfinchlorid. + 2 $\frac{1}{2}$ HgCl<sub>2</sub> (J. pr. [2] 66, 460 C. 1903 [1] 561).  
\*2) Methyldiisopropylsulfinchlorid. + HgCl<sub>2</sub> (J. pr. [2] 66, 461 C. 1903 [1] 561).  
\*3) Methyläthylisobutylsulfinchlorid (J. pr. [2] 66, 457 C. 1903 [1] 561).  
\*4) Methyläthylbutylsulfinchlorid. + 6HgCl<sub>2</sub> (J. pr. [2] 66, 457 C. 1903 [1] 561).  
\*5) Methyläthyl-sec. Butylsulfinchlorid. + 2(6)HgCl<sub>2</sub> (J. pr. [2] 66, 458 C. 1903 [1] 561).  
6) Methylpropylisopropylsulfinchlorid. + 6HgCl<sub>2</sub> (J. pr. [2] 66, 461 C. 1903 [1] 561).
- $C_7H_{15}N_3J$  1) Jodmethylat d. 1,3,5-Trimethylhexahydro-1,3,5-Triazin (A. 334, 227 C. 1904 [2] 899).

- $C_7HO_3NCl_4$  1) Chlorid d. 2,4,6-Trichlor-3-Nitrobenzol-1-Carbonsäure. Sm. 96° (R. 21, 388 C. 1903 [1] 152).
- $C_7H_2O_4NCl_3$  \*1) 2,4,5-Trichlor- $\beta$ -Nitrobenzol-1-Carbonsäure (R. 21, 380 C. 1903 [1] 152).  
3) 2,4,6-Trichlor-3-Nitrobenzol-1-Carbonsäure. Sm. 169,25° (R. 21, 387 C. 1903 [1] 152).
- $C_7H_2O_6N_4S$  1) 2,4,6-Trinitro-1-Rhodanbenzol. Zers. bei 285° (Soc. 85, 649 C. 1904 [2] 310).

- $C_7H_2O_7N_3Cl$  \*1) Chlorid d. 2,4,6-Trinitrobenzol-1-Carbonsäure. Sm. 163° (*R.* 21, 381 *C.* 1903 [1] 152).
- $C_7H_3ONCl_2$  3) Nitril d. 3,5-Dichlor-2-Oxybenzol-1-Carbonsäure. Sm. 139° (*B.* 37, 4030 *C.* 1904 [2] 1718).
- $C_7H_3OCl_2Br$  1) Chlorid d. 2-Chlor-3-Brombenzol-1-Carbonsäure. Sm. 41—42°; Sd. 150—152°<sub>25</sub> (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- 2) Chlorid d. 2-Chlor-4-Brombenzol-1-Carbonsäure. Sm. 35—36°; Sd. 152—153°<sub>22</sub> (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- 3) Chlorid d. 2-Chlor-5-Brombenzol-1-Carbonsäure. Sd. 147°<sub>19</sub> (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- 4) Chlorid d. 2-Chlor-4-Brombenzol-1-Carbonsäure. Sm. 30°; Sd. 145—147°<sub>24</sub> (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- 5) Chlorid d. 3-Chlor-2-Brombenzol-1-Carbonsäure. Sm. 40—41°; Sd. 144—146°<sub>22</sub> (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- 6) Chlorid d. 3-Chlor-4-Brombenzol-1-Carbonsäure. Sm. 58—59°; (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- 7) Chlorid d. 3-Chlor-5-Brombenzol-1-Carbonsäure. Sm. 33—34°; (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- 8) Chlorid d. 3-Chlor-6-Brombenzol-1-Carbonsäure. Sm. 34—35°; Sd. 146—147°<sub>28</sub> (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- 9) Chlorid d. 4-Chlor-2-Brombenzol-1-Carbonsäure. Sm. 32—33°; Sd. 155—156°<sub>29</sub> (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- 10) Chlorid d. 4-Chlor-3-Brombenzol-1-Carbonsäure. Sm. 37—38°; (*Soc.* 85, 1263 *C.* 1904 [2] 1302).
- $C_7H_3O_2NCl_2$  \*4) Chlorid d. Pyridin-2,6-Dicarbonsäure. Sm. 61° (*M.* 24, 206 *C.* 1903 [2] 48).
- $C_7H_3O_2NCl_4$  4) 3,4,5,6-Tetrachlor-2-Nitro-1-Methylbenzol. Sm. 86—88° (*Soc.* 85, 1280 *C.* 1904 [2] 1293).
- 5) 2,4,5,6-Tetrachlor-3-Nitro-1-Methylbenzol. Sm. 131—134° (*Soc.* 85, 1280 *C.* 1904 [2] 1293).
- 6) 2,3,5,6-Tetrachlor-4-Nitro-1-Methylbenzol. Sm. 150—152° (*Soc.* 85, 1282 *C.* 1904 [2] 1293).
- 7) 3,4,5-Trichlor-2-Nitro-1-Chlormethylbenzol<sup>p</sup> Sm. 159° (*Soc.* 85, 1285 *C.* 1904 [2] 1293).
- $C_7H_3O_3NCl_4$  1) 2,3,5,6-Tetrachlor-1-Nitro-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 90° u. Zers. (*A.* 328, 293 *C.* 1903 [2] 1248).
- $C_7H_3O_3N_2Cl_3$  1) Amid d. 2,4,6-Trichlor-3-Nitrobenzol-1-Carbonsäure. Sm. 228,5° (*R.* 21, 389 *C.* 1903 [1] 152).
- $C_7H_3O_5N_2Cl$  \*3) Chlorid d. 3,5-Dinitrobenzol-1-Carbonsäure. Sm. 74° (*J. pr.* [2] 69, 455 *C.* 1904 [2] 594).
- $C_7H_3O_6N_3Cl_2$  1) 3,5-Dichlor-2,4,6-Trinitro-1-Methylbenzol. Sm. 200—201° (*Am.* 32, 178 *C.* 1904 [2] 951).
- $C_7H_3O_6N_3Br_2$  \*1) 3,5-Dibrom-2,4,6-Trinitro-1-Methylbenzol. Sm. 229—230° (*R.* 23, 127 *C.* 1904 [2] 200).
- $C_7H_2O_7N_2Br$  1) 2-Brom-4,6-Dinitro-3-Oxybenzol-1-Carbonsäure<sup>p</sup> Sm. 217—218° (*Soc.* 81, 1484 *C.* 1903 [1] 23, 144).
- $C_7H_3NClBr$  1) Nitril d. 2-Chlor-4-Brombenzol-1-Carbonsäure. Sm. 51—61° (*Am.* 30, 516 *C.* 1904 [1] 371).
- $C_7H_4ONCl$  5) Nitril d. 5-Chlor-2-Oxybenzol-1-Carbonsäure. Sm. 165—167° (*B.* 37, 4026 *C.* 1904 [2] 1718).
- 6) Nitril d. 3-Chlor-4-Oxybenzol-1-Carbonsäure. Sm. 155° (*B.* 37, 4034 *C.* 1904 [2] 1719).
- $C_7H_4ONCl_3$  \*2) Amid d. 2,4,6-Trichlorbenzol-1-Carbonsäure. Sm. 181° (*R.* 21, 386 *C.* 1903 [1] 152).
- $C_7H_4OClJ$  \*1) Chlorid d. 2-Jodbenzol-1-Carbonsäure. Sm. 30—31°; Sd. 159°<sub>27</sub> (*Soc.* 85, 1272 *C.* 1904 [2] 1303).
- \*2) Chlorid d. 4-Jodbenzol-1-Carbonsäure. Sm. 71—72°; Sd. 163 bis 164°<sub>32</sub> (*Soc.* 85, 1274 *C.* 1904 [2] 1303).
- 3) Chlorid d. 3-Jodbenzol-1-Carbonsäure. Sd. 159—160°<sub>25</sub> (*Soc.* 85, 1273 *C.* 1904 [2] 1303).
- 2) 4-Chlor-1-Keto-1,2-Dihydrobenzoxazol. Sm. 184—185° (*Am.* 32, 26 *C.* 1904 [2] 696).
- $C_7H_4O_2NCl$  2) 2,3,5-Trichlorpyridin-4-Methylcarbonsäure. Sm. 144—145°.
- $C_7H_4O_2NCl_3$  12) Ca, Ba, Ag (*Soc.* 83, 399 *C.* 1903 [1] 841, 1141).

- $C_7H_4O_2NBr_3$  \*6) 2, 4, 6-Tribrom-3-Amidobenzol-1-Carbonsäure. Salze siehe (Soc. 85, 239 C. 1904 [1] 1006).  
9) 2-Tribrom-3-Amidobenzol-1-Carbonsäure. Sm. 154—156° (C. 1904 [2] 104).
- $C_7H_4O_2ClBr$  \*3) 2-Chlor-4-Brombenzol-1-Carbonsäure. Sm. 166—167° (Soc. 85, 1266 C. 1904 [2] 1302).  
\*4) 2-Chlor-6-Brombenzol-1-Carbonsäure. Sm. 143—144° (Soc. 85, 1268 C. 1904 [2] 1302).  
\*5) 3-Chlor-4-Brombenzol-1-Carbonsäure. Sm. 218° (Soc. 85, 1269 C. 1904 [2] 1302).  
\*6) 4-Chlor-2-Brombenzol-1-Carbonsäure. Sm. 154—155° (Soc. 85, 1267 C. 1904 [2] 1302).  
7) 2-Chlor-3-Brombenzol-1-Carbonsäure. Sm. 165° (Soc. 85, 1266 C. 1904 [2] 1302).  
8) 2-Chlor-5-Brombenzol-1-Carbonsäure. Sm. 155—156° (Soc. 85, 1267 C. 1904 [2] 1302).  
9) 3-Chlor-2-Brombenzol-1-Carbonsäure. Sm. 143—144° (Soc. 85, 1266 C. 1904 [2] 1302).  
10) 3-Chlor-5-Brombenzol-1-Carbonsäure. Sm. 189—190° (Soc. 85, 1269 C. 1904 [2] 1302).  
11) 3-Chlor-6-Brombenzol-1-Carbonsäure. Sm. 148—149° (Soc. 85, 1267 C. 1904 [2] 1302).  
12) 4-Chlor-3-Brombenzol-1-Carbonsäure. Sm. 214° (Soc. 85, 1269 C. 1904 [2] 1302).
- $C_7H_4O_2NCl$  \*3) Aldehyd d. 6-Chlor-3-Nitrobenzol-1-Carbonsäure. Sm. 80° (D.R.P. 102745; M. 25, 366 C. 1904 [2] 322).  
9) 4-Chlor-2-Nitrosobenzol-1-Carbonsäure (B. 36, 3302 C. 1903 [2] 1173).  
10) Aldehyd d. 4-Chlor-2-Nitrobenzol-1-Carbonsäure. Sm. 67—68° (D.R.P. 128727 C. 1902 [1] 552; B. 36, 3300 C. 1903 [2] 1173; D.R.P. 149748, 149749 C. 1904 [1] 909). — \*III, 11.
- $C_7H_4O_2NCl_3$  3) 2, 3, 5-Trichlor-1-Nitro-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 70° u. Zers. (A. 328, 291 C. 1903 [2] 1248).
- $C_7H_4O_2NBr$  3) 4-Brom-2-Nitrosobenzol-1-Carbonsäure. Sm. 222—225° (B. 37, 1872 C. 1904 [1] 1601).  
4) Aldehyd d. 4-Brom-2-Nitrobenzol-1-Carbonsäure. Sm. 97—98° (B. 36, 3302 C. 1903 [2] 1173; D.R.P. 149748, 149749 C. 1904 [1] 909; B. 37, 1867 C. 1904 [1] 1601).
- $C_7H_4O_2NBr_3$  4) Methyläther d. 4, 5, 6-Tribrom-2-Nitro-1-Oxybenzol. Sm. 109 bis 110° (Am. 30, 68 C. 1903 [2] 355).
- $C_7H_4O_2NJ$  1) Aldehyd d. 4-Jod-2-Nitrobenzol-1-Carbonsäure. Sm. 110—111° (B. 36, 3303 C. 1903 [2] 1173; D.R.P. 149749 C. 1904 [1] 909).
- $C_7H_4O_2NJ_3$  1) Methyläther d. 2, 4, 6-Trijod-3-Nitro-1-Oxybenzol. Sm. 128° (Am. 32, 302 C. 1904 [2] 1385).
- $C_7H_4O_2Cl_2S$  \*1) stab. Chlorid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 79° (Am. 30, 247 C. 1903 [2] 1118).  
\*2) lab. Chlorid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 40° (Am. 30, 247 C. 1903 [2] 1118).
- $C_7H_4O_4NCl$  \*1) 3-Chlor-2-Nitrobenzol-1-Carbonsäure (C. 1903 [2] 1174).  
\*3) 5-Chlor-2-Nitrobenzol-1-Carbonsäure (C. 1903 [2] 1174).  
\*5) 4-Chlor-3-Nitrobenzol-1-Carbonsäure (C. 1903 [2] 1174).  
\*7) 6-Chlor-3-Nitrobenzol-1-Carbonsäure (C. 1903 [2] 1174).  
\*13) 2-Chlor-3-Nitrobenzol-1-Carbonsäure (C. 1903 [2] 1174).  
14) 2-Chlor-3-Nitro-2-Methyl-1,4-Benzochinon. Sm. 70—71° (Soc. 85, 528 C. 1904 [1] 1256, 1490).  
15) 3-Chlor-5-Nitro-2-Methyl-1,4-Benzochinon (oder 5-Chlor-3-Nitro-2-Methyl-1,4-Benzochinon). Sm. 128° (A. 328, 314 C. 1903 [2] 1246).
- $C_7H_4O_4NBr$  \*3) 5-Brom-2-Nitrobenzol-1-Carbonsäure (C. 1903 [2] 1174).  
13) Aldehyd d. 5-Brom-3-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 147—148° (B. 37, 3935 C. 1904 [2] 1596).
- $C_7H_4O_4N_2Br_3$  7) 3, 5-Dibrom-2, 4-Dinitro-1-Methylbenzol. Sm. 157° (R. 21, 126 C. 1904 [2] 200).
- $C_7H_4O_6NBr$  \*2) 3-Brom-5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 222° (G. 34 [1] 274 C. 1904 [1] 1499).

- $C_7H_4O_6N_3Cl$  1) 3-Chlor-2,4,6-Trinitro-1-Methylbenzol. Sm. 148,5° (*B.* 37, 2094 *C.* 1904 [2] 34).
- $C_7H_4O_6N_4Cl_2$  1) 4,5-Dichlor-2,6-Dinitro-1-Methylnitramidobenzol. Sm. 121° (*R.* 21, 420 *C.* 1903 [1] 504).
- $C_7H_4O_6N_4Br_2$  1) 4,5-Dibrom-2,6-Dinitro-1-Methylnitramidobenzol. Sm. 140° (*R.* 21, 415 *C.* 1903 [1] 505).
- $C_7H_4O_7N_3Cl$  1) Methyläther d. 3-Chlor-2,4,6-Trinitro-1-Oxybenzol. Sm. 88° (*R.* 21, 323 *C.* 1903 [1] 79).
- $C_7H_4O_7N_3Br$  1) Methyläther d. 3-Brom-2,4,6-Trinitro-1-Oxybenzol. Sm. 97° (*R.* 23, 121 *C.* 1904 [2] 206).
- $C_7H_4O_6N_2S$  1) 3,5-Dinitrobenzol-1-Carbonsäure-2-Sulfonsäure. Sm. oberh. 300° (*G.* 33 [2] 334 *C.* 1904 [1] 278).
- $C_7H_5O_2NCl_2$  17) 3,5-Dichlor-2-Oxybenzaloxim. Sm. 195—196° (*B.* 37, 4029 *C.* 1904 [2] 1718).
- $C_7H_5O_2NBr_2$  \*16) 4,5-Dibrom-2-Amidobenzol-1-Carbonsäure. Sm. 227° (*J. pr.* [2] 69, 36 *C.* 1904 [1] 641).
- \*17) 3,5-Dibrom-2-Amidobenzol-1-Carbonsäure. Ba +  $3\frac{1}{2}H_2O$  (*C.* 1903 [2] 1194).
- $C_7H_5O_3N_2Cl$  \*2) Diazobenzolchlorid-4-Carbonsäure (*A.* 325, 302 *C.* 1903 [1] 704).
- 3) Diazobenzolchlorid-3-Carbonsäure (*A.* 325, 302 *C.* 1903 [1] 704).
- $C_7H_5O_3N_2Br_3$  3) 4,5,6-Tribrom-2-Nitro-1-Methylamidobenzol. Sm. 128° (*R.* 21, 415 *C.* 1903 [1] 505).
- $C_7H_5O_3N_3Br_2$  1) Amid d. 3,5-Dibrom-4-Oxyphenylazoameisensäure. Zers. bei 225° (*A.* 334, 174 *C.* 1904 [2] 834).
- $C_7H_5O_3N_4Cl_3$  1) 2,6-Diketo-8-Trichlormethyl-3-Methylpurin. Zers. oberh. 300° (*D.R.P.* 153121 *C.* 1904 [2] 625).
- $C_7H_5O_3NCl_2$  3) Methyläther d. 4,5-Dichlor-2-Nitro-1-Oxybenzol. Sm. 86° (*R.* 21, 421 *C.* 1903 [1] 504).
- 4) 3,5-Dichlor-1-Nitro-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 74—76° u. Zers. (*A.* 328, 289 *C.* 1903 [2] 1248).
- $C_7H_5O_3NBr_2$  \*7) Methyläther d. 2,6-Dibrom-4-Nitro-1-Oxybenzol. Sm. 122,6° (*Am.* 30, 59 *C.* 1903 [2] 354).
- $C_7H_5O_3NS$  \*1) 2-Cyanbenzol-1-Sulfonsäure.  $NH_4$ , K (*Am.* 30, 263 *C.* 1903 [2] 1119; *Am.* 30, 371 *C.* 1904 [1] 277).
- 6) Phenylsulfonisocycansäure. Sd. 129°. HJ (*B.* 36, 3214 *C.* 1903 [2] 1055; *B.* 37, 690 *C.* 1904 [1] 1074).
- $C_7H_5O_3N_2Cl$  \*2) 6-Chlor-3-Nitrobenzaloxim. Sm. 146—147° (*M.* 25, 367 *C.* 1904 [2] 322).
- \*12) Amid d. 4-Chlor-3-Nitrobenzol-1-Carbonsäure (*C.* 1903 [2] 1174).
- \*13) Amid d. 6-Chlor-3-Nitrobenzol-1-Carbonsäure (*C.* 1903 [2] 1174).
- 14) 4-Chlor-2-Nitrobenzaloxim. Sm. 172° (*B.* 37, 1865 *C.* 1904 [1] 1600).
- 15) Chloramid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 183—184° u. Zers. (*Am.* 30, 402 *C.* 1904 [1] 238).
- $C_7H_5O_3N_2Br$  9) 4-Brom-2-Nitrobenzaloxim. Sm. 164° (*B.* 37, 1868 *C.* 1904 [1] 1601).
- $C_7H_5O_3ClHg$  1) Ohlmerkurosalicylsäure. Na, K, Li, Ca (*G.* 32 [2] 308 *C.* 1903 [1] 579).
- $C_7H_5O_3Cl_3S$  4) 2,4,5-Trichlorphenylmethan- $\alpha$ -Sulfonsäure (*D.R.P.* 146946 *C.* 1904 [1] 66).
- $C_7H_5O_3BrHg$  1) Brommerkurosalicylsäure (*G.* 32 [2] 310 *C.* 1903 [1] 579).
- $C_7H_5O_3JHg$  1) Jodmerkurosalicylsäure (*G.* 32 [2] 310 *C.* 1903 [1] 579).
- $C_7H_5O_4N_2Cl$  \*5) 2,4-Dinitro-1-Chlormethylbenzol. Sm. 33—34° (*B.* 37, 3599 *C.* 1904 [2] 1500).
- $C_7H_5O_4ClS$  \*2) 3-Chlorid d. Benzol-1-Carbonsäure-3-Sulfonsäure. Sm. 133—134° (*M.* 23, 1117 *C.* 1903 [1] 396).
- 3) Aldehyd d. 4-Chlorbenzol-1-Carbonsäure-2-Sulfonsäure (*D.R.P.* 117540 *C.* 1901 [1] 430). — \*III, 16.
- 4) Aldehyd d. 5-Chlorbenzol-1-Carbonsäure-2-Sulfonsäure (*D.R.P.* 91818). — \*III, 16.
- $C_7H_5O_6N_2Cl$  3) Methyläther d. 5-Chlor-2,4-Dinitro-1-Oxybenzol. Sm. 105° (*R.* 23, 122 *C.* 1904 [2] 206).
- $C_7H_5O_6N_2Br$  5) Methyläther d. 5-Brom-2,4-Dinitro-1-Oxybenzol. Sm. 110° (*R.* 23, 120 *C.* 1904 [2] 206).

- $C_7H_5O_6NS$  3) Aldehyd d. 3-Nitrobenzol-1-Carbonsäure-6-Sulfonsäure (D.R.P. 94504, 102745). — \*III, 16.  
 $C_7H_5O_4NS$  \*1) 2-Nitrobenzol-1-Carbonsäure-4-Sulfonsäure (*M.* 23, 1138 *C.* 1903 [1] 397).  
 $C_7H_5N_2BrS$  \*2) 2-Brom-1-Amidobenzthiazol. Sm. 209—211° (*B.* 36, 3135 *C.* 1903 [2] 1071).  
 $C_7H_5ONCl$  \*6) Amid d. 2-Chlorbenzol-1-Carbonsäure (*C.* 1903 [2] 1173).  
 \*7) Amid d. 3-Chlorbenzol-1-Carbonsäure. Sm. 134° (*J. pr.* [2] 67, 498 *C.* 1903 [2] 251).  
 \*11) Phenylchloramid d. Essigsäure. Sm. 44° (*Am.* 29, 304 *C.* 1903 [1] 1166).  
 \*12) 4-Chlorphenylamid d. Ameisensäure. Sm. 101° (*Am.* 29, 304 *C.* 1903 [1] 1166).  
 14) Aldehyd d. 4-Chlor-2-Amidobenzol-1-Carbonsäure. Sm. 86° (*B.* 37, 1873 *C.* 1904 [1] 1601).  
 15) Aldehyd d. 2-Chlor-4-Amidobenzol-1-Carbonsäure. Sm. 147° (D.R.P. 86874). — \*III, 13.  
 $C_7H_5ONBr$  \*10) Phenylbromamid d. Ameisensäure. Sm. 79—80° (*Am.* 29, 304 *C.* 1903 [1] 1166).  
 $C_7H_5ON_2Br_2$  5) 2,6-Dibrom-4-Methyl-1-Diazobenzol. Sulfat (*Soe.* 83, 811 *C.* 1903 [2] 426).  
 $C_7H_5O_2NCl$  \*2) 6-Chlor-2-Nitro-1-Methylbenzol. Sm. 37,5° (*B.* 37, 1018 *C.* 1904 [1] 1202).  
 \*7) 2-Chlor-4-Nitro-1-Methylbenzol. Sm. 65° (*Soe.* 85, 1436 *C.* 1904 [2] 1740).  
 \*10) 4-Nitro-1-Chlormethylbenzol. +  $AlCl_3$  (*C.* 1903 [1] 147; *R.* 23, 103 *C.* 1904 [1] 1136).  
 \*17) 5-Chlor-2-Oxybenzaldoxim. Sm. 122° (*B.* 37, 4025 *C.* 1904 [2] 1717).  
 \*23) 6-Chlor-3-Amidobenzol-1-Carbonsäure (*C.* 1903 [2] 1174).  
 \*29) Amid d. 5-Chlor-2-Oxybenzol-1-Carbonsäure. Sm. 226—227° (*B.* 37, 4026 *C.* 1904 [2] 1718).  
 35) 6-Chlor-2-Imido-4-Oxy-1-Keto-5-Methyl-1,2-Dihydrobenzol? (*A.* 328, 318 *C.* 1903 [2] 1247).  
 36) 3-Chlor-4-Oxybenzaldoxim. Sm. 144—145° (*B.* 37, 4034 *C.* 1904 [2] 1719).  
 37) Amid d. 3-Chlor-4-Oxybenzol-1-Carbonsäure. Sm. 181—182° (*B.* 37, 4035 *C.* 1904 [2] 1719).  
 $C_7H_5O_2NBr$  24) 6-Brom-2-Nitro-1-Methylbenzol. Sm. 41° (*B.* 37, 1021 *C.* 1904 [1] 1203).  
 $C_7H_5O_2NJ$  12) 6-Jod-2-Nitro-1-Methylbenzol. Sm. 35,5° (*B.* 37, 1024 *C.* 1904 [1] 1203).  
 $C_7H_5O_2N_2Cl_2$  1) 4,5-Dichlor-2-Nitro-1-Methylamidobenzol. Sm. 148° (*R.* 21, 420 *C.* 1903 [1] 504).  
 $C_7H_5O_2N_2Br_2$  10) 4,5-Dibrom-2-Nitro-1-Methylamidobenzol. Sm. 165° (*R.* 21, 414 *C.* 1903 [1] 505).  
 $C_7H_5O_3NCl$  \*1) Methyläther d. 4-Chlor-2-Nitro-1-Oxybenzol. Sm. 98° (94—96°) (D.R.P. 137956 *C.* 1903 [1] 112; D.R.P. 140133 *C.* 1903 [1] 797; *B.* 36, 1689 *C.* 1903 [2] 111).  
 \*2) Methyläther d. 5-Chlor-2-Nitro-1-Oxybenzol. Sm. 71° (*R.* 21, 321 *C.* 1903 [1] 79).  
 14) 6-Chlor-3-Nitro-2-Oxy-Methylbenzol. Sm. 64,5° (*B.* 37, 1020 *C.* 1904 [1] 1202).  
 15) 6-Chlor-5-Nitro-2-Oxy-1-Methylbenzol. Sm. 135° (*B.* 37, 1020 *C.* 1904 [1] 1202).  
 16) 5-Chlor-3-Nitro-4-Oxy-1-Methylbenzol. Sm. 65°. Na (*A.* 328, 311 *C.* 1903 [2] 1246).  
 17) Methylester d. 5-Chlor-6-Oxypyridin-3-Carbonsäure. Sm. 218°. Na (*B.* 37, 3832 *C.* 1904 [2] 1614).  
 $C_7H_5O_3NBr$  \*7) Methylester d. 5-Brom-6-Oxypyridin-3-Carbonsäure. Sm. 221 bis 222° (*B.* 37, 3839 *C.* 1904 [2] 1615).  
 10) 6-Brom-3-Nitro-2-Oxy-1-Methylbenzol. Sm. 64° (*B.* 37, 1023 *C.* 1904 [1] 1203).

- $C_7H_6O_3NBr$  11) 6-Brom-5-Nitro-2-Oxy-1-Methylbenzol. Sm. 145,5° (*B.* 37, 1023 *C.* 1904 [1] 1203).  
 12) Methyläther d. 5-Brom-2-Nitro-1-Oxybenzol. Sm. 90° (*R.* 23, 119 *C.* 1904 [2] 206).
- $C_7H_6O_3Cl_2S$  10) 2,4-Dichlorphenylmethan- $\alpha$ -Sulfonsäure. Na (D.R.P. 146946 *C.* 1904 [1] 66).  
 11) 2,5-Dichlorphenylmethan- $\alpha$ -Sulfonsäure. Na +  $H_2O$  (D.R.P. 146946 *C.* 1904 [1] 66).  
 12) 3,4-Dichlorphenylmethan- $\alpha$ -Sulfonsäure. Na (D.R.P. 146946 *C.* 1904 [1] 66).
- $C_7H_6O_4NCl$  2) 4[oder 6]-Chlor-6[oder 4]-Nitro-2,5-Dioxy-1-Methylbenzol. Sm. 179—180° (*A.* 328, 316 *C.* 1903 [2] 1247).
- $C_7H_6O_4Cl_2S_2$  \*1) Chlorid d. 1-Methylbenzol-2,4-Disulfonsäure. Sm. 52° (*J. pr.* [2] 68, 331 *C.* 1903 [2] 1171).
- $C_7H_6O_4Br_2S_2$  1) Bromid d. 1-Methylbenzol-2,4-Disulfonsäure. Sm. 78° (*J. pr.* [2] 68, 334 *C.* 1903 [2] 1172).
- $C_7H_6O_3N_2S$  2) 2,6-Dinitro-1-Oxybenzylmethyläther-4-Sulfonsäure (D.R.P. 148085 *C.* 1904 [1] 135).
- $C_7H_7ONBr_2$  \*5) Methyläther d. 2,6-Dibrom-4-Amido-1-Oxybenzol. Sm. 66° (64—65°) (*Soc.* 81, 1479 *C.* 1903 [1] 23, 144; *Am.* 30, 62 *C.* 1903 [2] 354).
- $C_7H_7ON_2Cl$  10) Methyläther d. 2-Oxydiazobenzolchlorid (*A.* 325, 302 *C.* 1903 [1] 704).  
 11) Hydrazid d. 4-Chlorbenzol-1-Carbonsäure. Sm. 163° (*C.* 1904 [2] 1493).
- $C_7H_7ON_2Br$  \*4) Methyläther d. 4-Bromdiazobenzol (*A.* 325, 245 *C.* 1903 [1] 632).  
 \*8) Hydrazid d. 4-Brombenzol-1-Carbonsäure. Sm. 164° (*C.* 1904 [2] 1493).
- $C_7H_7ON_2Br_3$  1) Methylamid d. 3,4,5-Tribrom-1-Methylpyrrol-2-Carbonsäure. Sm. 176° (*B.* 37, 2802 *C.* 1904 [2] 533).
- $C_7H_7ON_2J$  1) 2-Jodphenylharnstoff. Sm. 197—198° (*M.* 25, 956 *C.* 1904 [2] 1638).  
 2) 3-Jodphenylharnstoff. Sm. 174° (*M.* 25, 957 *C.* 1904 [2] 1638).  
 3) 4-Jodphenylharnstoff. Sm. 288—300° (*M.* 25, 945 *C.* 1904 [2] 1637).
- $C_7H_7OJF_2$  \*1) 1-Methylbenzol-2-Jodofluorid. Sm. 120° (*A.* 328, 135 *C.* 1903 [2] 990).  
 \*2) 1-Methylbenzol-4-Jodofluorid. Zers. bei 207° (*A.* 328, 136 *C.* 1903 [2] 990).  
 3) 1-Methylbenzol-3-Jodofluorid. Sm. 178° (*A.* 328, 136 *C.* 1903 [2] 990).
- $C_7H_7O_2NBr_2$  2) 4,6-Dibrom-2-Amido-3,5-Dioxy-1-Methylbenzol. HCl (*B.* 37, 1426 *C.* 1904 [1] 1418).
- $C_7H_7O_2N_2Br$  \*9) 4-Brom-1-Methylnitramidobenzol (*B.* 36, 2507 *C.* 1903 [2] 490).
- $C_7H_7O_2N_4Cl$  7) 8-Chlor-2,6-Diketo-1,3-Dimethylpurin (D.R.P. 145880 *C.* 1903 [2] 1036).
- $C_7H_7O_2ClS$  \*2) Chlorid d. 1-Methylbenzol-2-Sulfonsäure (D.R.P. 142116 *C.* 1903 [2] 79).
- $C_7H_7O_3N_2Cl$  \*1) Methyläther d. 4-Chlor-5-Nitro-2-Amido-1-Oxybenzol. Sm. 132° (D.R.P. 137956 *C.* 1903 [1] 113; D.R.P. 153940 *C.* 1904 [2] 1014).
- $C_7H_7O_3N_2Br$  2) Methylester d. 3-Brom-1-Amido-2-Keto-1,2-Dihydropyridin-5-Carbonsäure. Sm. 144—145,5° (*B.* 37, 3837 *C.* 1904 [2] 1615).
- $C_7H_7O_3ClS$  \*6) 4-Chlorphenylmethan- $\alpha$ -Sulfonsäure. Anilinsalz (D.R.P. 146946 *C.* 1904 [1] 66).  
 11) 2-Chlorphenylmethan- $\alpha$ -Sulfonsäure. Na, K, Anilinsalz (D.R.P. 141783 *C.* 1903 [1] 1324; D.R.P. 146946 *C.* 1904 [1] 66; D.R.P. 150366 *C.* 1904 [1] 1307).
- $C_7H_7O_4NS$  \*7) 1-Amid d. Benzol-1-Carbonsäure-2-Sulfonsäure +  $H_2O$ . Salze siehe (*Am.* 30, 364 *C.* 1904 [1] 276).  
 \*8) 2-Amid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Salze siehe (*Am.* 30, 353 *C.* 1904 [1] 276).  
 \*9) 3-Amid d. Benzol-1-Carbonsäure-3-Sulfonsäure. Sm. 237—238° (*Am.* 30, 329 *C.* 1903 [2] 1123).

- $C_7H_7O_4NS$  14) Benzoylsulfaminsäure (Benzamid-sulfonsäure). Ag, Ag<sub>2</sub>, Benzamid-salz (A. 333, 283 C. 1904 [2] 904).
- $C_7H_7O_4NS$  \*10) 2-Amidobenzol-1-Carbonsäure-4-Sulfonsäure (D.R.P. 138188 C. 1903 [1] 371).
- 23) 3-Amid d. 4-Oxybenzol-1-Carbonsäure-3-Sulfonsäure. Sm. 258° (Zers. bei 265°). Na + 4H<sub>2</sub>O, Ba + 6½H<sub>2</sub>O (Am. 31, 41 C. 1904 [1] 441).
- $C_7H_7O_6NS$  \*3) 5-Nitro-2-Oxyphenylmethan-α-Sulfonsäure (D.R.P. 150313 C. 1904 [1] 1115).
- $C_7H_8ONCl$  \*8) Methyläther d. 4-Chlor-2-Amido-1-Oxybenzol. Sm. 84° (D.R.P. 137956 C. 1903 [1] 112).
- 12) 5-Chlor-3-Amido-4-Oxy-1-Methylbenzol. Sm. 89–90°. HCl (A. 328, 313 C. 1903 [2] 1247).
- $C_7H_8ON_2Br_2$  1) Methylamid d. 3,4-Dibrom-1-Methylpyrrol-2-Carbonsäure. Sm. 137° (B. 37, 2801 C. 1904 [2] 533).
- $C_7H_8O_3NCl$  \*1) 4[oder 6]-Chlor-6[oder 4]-Amido-2,5-Dioxy-1-Methylbenzol. Sm. 160–162° (A. 328, 317 C. 1903 [2] 1247).
- $C_7H_8O_3N_2S$  \*9) Diamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 263° (Am. 30, 363 C. 1904 [1] 276).
- 10) Phenylsulfonharnstoff. Sm. 167,4° (B. 37, 694 C. 1904 [1] 1074).
- 11) Methylester d. p-Acetylamidothiazol-p-Carbonsäure. Sm. 178° u. Zers. (B. 36, 3550 C. 1903 [2] 1379).
- $C_7H_8O_4N_2S$  \*10) Amid d. 4-Nitro-1-Methylbenzol-2-Sulfonsäure (D.R.P. 143455 C. 1903 [2] 405).
- $C_7H_8O_4N_2S_2$  1) Methylenamid d. Benzol-1,3-Disulfonsäure. Zers. oberh. 180° (B. 37, 4104 C. 1904 [2] 1727).
- $C_7H_8O_5N_2S$  9) 5-Nitro-2-Amidophenylmethan-α-Sulfonsäure. NH<sub>4</sub> (D.R.P. 150366 C. 1904 [1] 1307).
- 10) 1-Methylnitramidobenzol-4-Sulfonsäure. K (A. 330, 33 C. 1904 [1] 1141).
- $C_7H_8O_6N_2S$  1) p-Nitro-p-Amido-2-Oxyphenylmethan-α-Sulfonsäure (D.R.P. 141783 C. 1903 [1] 1325).
- $C_7H_8O_6N_2S$  1) Nitromethoxychinolnitrosäuresulfonsäure. Ba (Am. 29, 119 C. 1903 [1] 709).
- $C_7H_8NCl_2P$  1) Methylphenylamidodichlorphosphin. Sd. 251° (A. 326, 221 C. 1903 [1] 866).
- $C_7H_8NCl_2P$  1) Methylphenylamidophosphortetrachlorid (A. 326, 221 C. 1903 [1] 866).
- $C_7H_8ON_2Br$  2) Methylamid d. 3[oder 4]-Brom-1-Methylpyrrol-2-Carbonsäure. Sm. 112° (B. 37, 2801 C. 1904 [2] 533).
- $C_7H_8O_2NS$  \*11) Methylamid d. Benzolsulfonsäure. Sm. 30–31° (B. 36, 2706 C. 1903 [2] 829).
- $C_7H_8O_3NS$  \*15) 2-Methylphenylsulfaminsäure (D.R.P. 151134 C. 1904 [1] 1381).
- \*17) 4-Methylphenylsulfaminsäure (D.R.P. 151134 C. 1904 [1] 1381).
- $C_7H_8O_4NS$  8) 5-Amido-2-Oxyphenylmethan-α-Sulfonsäure (D.R.P. 150313 C. 1904 [1] 1115).
- 9) 4-Amido-1-Oxybenzylmethyläther-3-Sulfonsäure (D.R.P. 146655 C. 1903 [2] 1301).
- $C_7H_8O_4N_2Br$  1) Bromakrylamidoacetylamidoessigsäure. Sm. 202° u. Zers. (B. 37, 2511 C. 1904 [2] 427).
- $C_7H_8O_5NS_2$  1) α-Phenylsulfonamidomethan-α-Sulfonsäure. Na (B. 37, 4100 C. 1904 [2] 1726).
- $C_7H_8N_2ClS$  1) Äthyläther d. 4-Chlor-2-Merkapto-5-Methyl-1,3-Diazin. Sd. 157 bis 159°<sub>25</sub> (Am. 31, 596 C. 1904 [2] 242).
- $C_7H_{10}ONCl$  \*4) Verbindung (aus Chlordimethyläther u. Pyridin). + HgCl<sub>2</sub> (A. 334, 52 C. 1904 [2] 948).
- $C_7H_{10}ONJ$  2) Jodmethylat d. 2-Methylimidomethylfuran (A. 335, 373 C. 1904 [2] 1406).
- $C_7H_{10}ON_2S$  7) Äthyläther d. 2-Merkapto-4-Keto-5-Methyl-3,4-Dihydro-1,3-Diazin. Sm. 158–159° (Am. 31, 595 C. 1904 [2] 241).
- $C_7H_{10}ON_3Cl$  1) 5-Chlor-1-Semicarbazol-1,2,3,4-Tetrahydrobenzol. Sm. 190° (Soc. 83, 500 C. 1903 [1] 1028, 1352).
- $C_7H_{10}ON_3Br$  1) 5-Brom-1-Semicarbazol-1,2,3,4-Tetrahydrobenzol. Sm. 180 bis 198° (Soc. 83, 501 C. 1903 [1] 1352).

- $C_7H_{10}O_2N_2S$  \*4) Aethylester d. 2-Amidothiazol-4-Methylcarbonsäure. Sm. 94° (*C. r.* 138, 422 *C.* 1904 [1] 789).
- $C_7H_{10}O_2N_3Cl$  9) Methyläther d. 2-Merkapto-4, 6-Diketo-5-Aethyl-3, 4, 5, 6-Tetrahydro-1,3-Diazin. Sm. 257° (*Am.* 32, 353 *C.* 1904 [2] 1414).
- $C_7H_{10}O_3N_2S$  1) Diäthyläther d. 6-Chlor-2,4-Dioxy-1,3,5-Triazin. Sm. 43—44°; Sd. 144—145°<sub>12-14</sub> (*B.* 36, 3195 *C.* 1903 [2] 956).
- $C_7H_{10}O_4N_2Br_2$  \*2) 2,4-Diamido-1-Methylbenzol-5-Sulfonsäure (*C.* 1904 [1] 1410).
- $C_7H_{10}O_4N_2S$  \*4) 2,6-Diamido-1-Methylbenzol-4-Sulfonsäure (*C.* 1904 [1] 1410).
- $C_7H_{10}O_4N_2S$  12) 2,4-Diamido-1-Methylbenzol-6-Sulfonsäure (*C.* 1904 [1] 1410).
- $C_7H_{10}O_4N_2Br_2$  1)  $\alpha\beta$ -Dibrompropionylamidoacetylamidoessigsäure. Sm. 184° u Zers. (*B.* 37, 2509 *C.* 1904 [2] 427).
- $C_7H_{10}O_4N_2S$  3) 2,6-Diamido-1-Oxybenzylmethyläther-4-Sulfonsäure (D.R.P. 148085 *C.* 1904 [1] 135).
- $C_7H_{10}O_6NBr$  1) Diäthylester d. Bromnitromalonsäure. Sd. 136—137°<sub>11</sub> (*B.* 37, 1780 *C.* 1904 [1] 1483).
- $C_7H_{10}NClS$  1) Chlormethylat d. 2-Merkaptopyridin-2-Methyläther. Sm. 97°.
- $C_7H_{10}NClSe$  2 +  $PtCl_4$  (*A.* 331, 250 *C.* 1904 [1] 1222).
- $C_7H_{10}NJS$  1) Chlormethylat d. 2-Selenopyridin-2-Methyläther. Sm. 86°.
- $C_7H_{10}NJSe$  2 +  $PtCl_4$  (*A.* 331, 253 *C.* 1904 [1] 1222).
- $C_7H_{10}NJSe$  \*1) Jodmethylat d. 2-Merkaptopyridin-2-Methyläther. Sm. 155 bis 156° (*A.* 331, 250 *C.* 1904 [1] 1222).
- $C_7H_{10}N_3ClS$  1) Jodmethylat d. 2-Selenopyridin-2-Methyläther. Sm. 186° (*A.* 331, 252 *C.* 1904 [1] 1222).
- $C_7H_{11}ONS$  1) Methyläther d. 6-Chlor-4-Methylamido-2-Merkapto-5-Methyl-1,3-Diazin. Sm. 157° (*Am.* 32, 354 *C.* 1904 [2] 1415).
- $C_7H_{11}O_2N_2P$  2) Caproylsenföl. Sd. 108°<sub>23</sub> (*Soc.* 85, 807 *C.* 1904 [2] 201, 519).
- $C_7H_{11}O_2N_2P$  2) Monamid-Methylphenylamid d. Phosphorsäure. Sm. 125° (*A.* 326, 254 *C.* 1903 [1] 868).
- $C_7H_{11}O_4N_2Br$  1)  $\alpha$ -Brompropionylamidoacetylamidoessigsäure. Sm. 166—167° (*B.* 36, 2986 *C.* 1903 [2] 1112).
- $C_7H_{12}O_2N_4S$  1) 1-Ursido-2-Thiocarbonyl-4-Keto-5-Methyl-3-Aethyltetrahydroimidazol. Sm. 153° (*C.* 1904 [2] 1027).
- $C_7H_{12}O_3NCl$  2) Aethylester d.  $\alpha$ -Chloracetylamidopropionsäure. Sm. 48,5—49,5° (*B.* 36, 2112 *C.* 1903 [2] 345).
- $C_7H_{13}ONS_2$  4) Methylster d. Isovalerylamidodithioameisensäure. Sm. 87° (*Bl.* [3] 29, 51 *C.* 1903 [1] 446).
- $C_7H_{13}O_6NS$  4) isom. 2-Merkapto-5- $[\alpha\beta\gamma\delta$ -Tetraoxybutyl]-4,5-Dihydrooxazol (Merkaptomannoxazolin). Sm. 216° (*C. r.* 138, 505 *C.* 1904 [1] 872).
- $C_7H_{14}ONCl$  3) Chlorid d. Dipropylamidoameisensäure. Sd. 100—104°<sub>12</sub> (*B.* 36, 2273 *C.* 1903 [2] 563).
- $C_7H_{14}ONBr$  4) Isoamylchloramid d. Essigsäure (*Am.* 29, 311 *C.* 1903 [1] 1166).
- $C_7H_{14}O_2NJ$  1) Amid d.  $\gamma$ -Bromhexan- $\gamma$ -Carbonsäure. Fl. (*C.* 1904 [2] 1666).
- $C_7H_{15}ONJ$  1) Jodmethylat d. 1-Methyltetrahydropyrrol-2-Carbonsäure. Na (*A.* 326, 128 *C.* 1903 [1] 844).
- $C_7H_{15}ONJ$  1) Aethyläther d. Trimethyl- $\beta$ -Oxyäthylammoniumjodid. Sm. 160—165° (*B.* 37, 3498 *C.* 1904 [2] 1320).

— 7 V —

- $C_7H_5O_3Cl_2BrS$  4) s-Dichlorid d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 99—100° (*Am.* 30, 487 *C.* 1904 [1] 369).
- $C_7H_5O_3NBrs$  5) uns-Dichlorid d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 89—90° (*Am.* 30, 488 *C.* 1904 [1] 369).
- $C_7H_5O_3NBrs$  \*1) 4-Brom-1-Cyanbenzol-2-Sulfonsäure.  $NH_4$ , Na +  $1\frac{1}{2}O$ , K +  $1\frac{1}{2}H_2O$ , Mg +  $8\frac{1}{2}H_2O$ , Ba +  $6H_2O$ , Zn +  $8\frac{1}{2}H_2O$ , Cu +  $4H_2O$  (*Am.* 30, 503 *C.* 1904 [1] 371).
- $C_7H_5O_2NCl_3P$  \*2) Imid d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure.  $NH_4$  (*Am.* 30, 489 *C.* 1904 [1] 370).
- $C_7H_5O_2NCl_3P$  1) Trichlorid d. Phenylamidophosphinsäure-3-Carbonsäure. Sm. 109—110° (*A.* 326, 242 *C.* 1903 [1] 868).
- $C_7H_5O_2NCl_3P$  2) Trichlorid d. Phenylamidophosphinsäure-4-Carbonsäure. Sm. 168° (*A.* 326, 243 *C.* 1903 [1] 868).
- $C_7H_5O_2NCl_3P$  3) 2-Chlorid d. Phosphorsäuredichloridphenylamid-2-Carbonsäure (Chlorid d. Phenylamidooxydichlorphosphin-2-Carbonsäure). Sm. 62° (*B.* 36, 1827 *C.* 1903 [2] 201).

- $C_7H_5O_7N_2ClS$  2) 2-Chlor-*p*-Dinitrophenylmethan- $\alpha$ -Sulfonsäure (D.R.P. 141783 *C.* 1903 [1] 1325).
- $C_7H_5O_5NClS$  2) 2-Chlorid d. Benzol-1-Carbonsäureamid-2-Sulfonsäure. Sm. 63° (*Am.* 30, 371 *C.* 1904 [1] 277).
- $C_7H_5O_4NBrS$  6) 1-Amid d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure +  $1\frac{1}{2}H_2O$ . Na +  $1\frac{1}{2}H_2O$ , K (*Am.* 30, 507 *C.* 1904 [1] 371).
- 7) 2-Amid d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 192–197°. Na, K, Mg +  $3H_2O$ , Ca +  $2H_2O$ , Sr +  $4H_2O$ , Ba +  $2H_2O$  (*Am.* 30, 508 *C.* 1904 [1] 371).
- $C_7H_5O_4N_2Cl_2S$  1) Dichloramid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 101° (*C.* 1904 [2] 435).
- $C_7H_5O_5NClS$  \*4) 6-Chlor-3-Nitro-1-Methylbenzol-4-Sulfonsäure (D.R.P. 145908 *C.* 1903 [2] 1099).
- 7) 6-Chlor-3-Nitrophenylmethan- $\alpha$ -Sulfonsäure. Na (D.R.P. 150366 *C.* 1904 [1] 1307; D.R.P. 154493 *C.* 1904 [2] 1557).
- $C_7H_7O_2NCl_2S$  \*8) Dichloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 83° (*C.* 1904 [2] 435).
- 9) Dichloramid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 33° (*C.* 1904 [2] 435).
- $C_7H_5ONCl_2P$  \*2) 4-Methylphenylmonamid d. Phosphorsäuredichlorid. Sm. 104° (*A.* 326, 237 *C.* 1903 [1] 867).
- 3) Benzylmonamid d. Phosphorsäuredichlorid. Fl. (*A.* 326, 174 *C.* 1903 [1] 819).
- $C_7H_5O_3NClS$  1) 6-Chlor-3-Amido-1-Methylbenzol-4-Sulfonsäure (D.R.P. 145908 *C.* 1903 [2] 1099).
- 2) 2-Chlorphenylamidomethan- $\alpha$ -Sulfonsäure (D.R.P. 148760 *C.* 1904 [1] 555).
- $C_7H_5NCl_2SP$  1) Methylphenylmonamid d. Thiophosphorsäuredichlorid. Fl. (*A.* 326, 257 *C.* 1903 [1] 869).
- 2) Benzylmonamid d. Thiophosphorsäuredichlorid. Fl. (*A.* 326, 205 *C.* 1903 [1] 821).
- $C_7H_5ONCl_2P$  1) Methylphenylamid d. Phosphorsäuredichlorid. Sd. 282° (*A.* 326, 253 *C.* 1903 [1] 868).
- $C_7H_5O_3NBrP$  1) 2-Brom-4-Methylphenylmonamid d. Phosphorsäure. Sm. 142° Cu (*A.* 326, 238 *C.* 1903 [1] 867).
- $C_7H_{10}ONClP$  1) Aethyläther d. 1-Piperidylloxylchlorphosphin. Sd. 125°<sub>25</sub> (*A.* 326, 157 *C.* 1903 [1] 761).
- $C_7H_{13}O_2NSP$  1) Propylmonamid d. Thiophosphorsäurediäthylester. Sd. 98°<sub>11</sub> (*A.* 326, 203 *C.* 1903 [1] 821).

## — 7 VI —

- $C_7H_5O_2NClBrS$  \*1) Chlorid d. 4-Brom-1-Cyanbenzol-2-Sulfonsäure. Sm. 82° (*Am.* 30, 515 *C.* 1904 [1] 371).
- $C_7H_7ONCl_2BrP$  1) 2-Brom-4-Methylphenylmonamid d. Phosphorsäuredichlorid (*A.* 326, 238 *C.* 1903 [1] 867).

**C<sub>8</sub>-Gruppe.**

- $C_8H_8$  \*3) Metastyrol (*B.* 35, 4154 *C.* 1903 [1] 159).
- $C_8H_{10}$  \*1) Aethylbenzol. Sd. 136°<sub>782</sub> (*B.* 36, 1632 *C.* 1903 [2] 25; *B.* 36, 3085 *C.* 1903 [2] 989).
- \*4) 1,4-Dimethylbenzol. Sm. 0° (3–4°) (*B.* 36, 2117 *C.* 1903 [2] 350; *B.* 36, 3086 *C.* 1903 [2] 990).
- $C_8H_{12}$  \*1) 1,2-Dimethyl-*p*-Dihydrobenzol (Cantharen) (*A.* 328, 115 *C.* 1903 [2] 245).
- \*2) 3,5-Dimethyl-1,2-Dihydrobenzol. Sd. 133–135° (*A.* 328, 114 *C.* 1903 [2] 245).
- \*8) 1,1-Dimethyl-1,2-Dihydrobenzol. Sd. 110–111° (*A.* 328, 113 *C.* 1903 [2] 245; *B.* 36, 2692 *C.* 1903 [2] 1061).
- \*9) 1,3-Dimethyl-1,2-Dihydrobenzol. Sd. 128–130° (*A.* 328, 114 *C.* 1903 [2] 245).
- 11) 1,1-Dimethyl-1,4-Dihydrobenzol. Sd. 135–137° (*A.* 328, 111 *C.* 1903 [2] 245).

- $C_8H_{12}$  12) 2-Methyl-4-Aethyl-R-Penten. . Sd. 135° (B. 36, 950 C. 1903 [1] 1022).  
 $C_8H_{14}$  \*14) Laurolen (Am. 32, 288 C. 1904 [2] 1222).  
 22) Kohlenwasserstoff (aus 1-Oxy-1-Aethylhexahydrobenzol). Sd. 134°<sub>760</sub> (C. r. 138, 1323 C. 1904 [2] 219; C. r. 139, 344 C. 1904 [2] 704).  
 $C_8H_{16}$  \*9) 1,3-Dimethylhexahydrobenzol. Sd. 120°<sub>751</sub> (C. 1904 [2] 955).

## — 8 II —

- $C_8H_4O_3$  \*1) Anhydrid d. Benzol-1,2-Dicarbonsäure (Am. 31, 263 C. 1904 [1] 1078).  
 $C_8H_4N_2$  \*2) Nitril d. Benzol-1,3-Dicarbonsäure. Sm. 161,5—162° (C. 1904 [2] 101).  
 $C_8H_4Br_6$  1) 1,4-Di[Tribrommethyl]benzol. Sm. 194° (B. 37, 1466 C. 1904 [1] 1342).  
 $C_8H_6O$  3) Phenyläther d.  $\alpha$ -Oxyäthin. Sd. 75°<sub>85</sub>. Cu, Ag (B. 36, 294 C. 1903 [1] 582).  
 $C_8H_6O_2$  \*6) Aldehyd d. Benzolketocarbonsäure +  $H_2O$ . Sm. 72—73° (B. 35, 4132 C. 1903 [1] 295; A. 325, 143 C. 1903 [1] 644).  
 $C_8H_6O_3$  \*3) Benzolketocarbonsäure (J. pr. [2] 68, 531 C. 1904 [1] 452).  
 \*16) Piperonal. 2 + 3  $H_2SO_4$  (R. 21, 356 C. 1903 [1] 151).  
 19) Verbindung + 3  $H_2O$  (aus Pannarol) (J. pr. [2] 68, 59 C. 1903 [2] 513).  
 $C_8H_6O_4$  \*1) 3,4-Dioxybenzol-3,4-Methylenäther-1-Carbonsäure (Soc. 83, 621 C. 1903 [1] 591).  
 \*2) Benzol-1,2-Dicarbonsäure (D.R.P. 138790 C. 1903 [1] 546; D.R.P. 140999 C. 1903 [1] 1106; R. 21, 352 C. 1903 [1] 150; D.R.P. 139956 C. 1903 [1] 857; C. 1903 [2] 1330).  
 \*3) Benzol-1,3-Dicarbonsäure. Sm. 348,5° (B. 36, 1798 C. 1903 [2] 283).  
 \*5) 2-Oxybenzol-1-Ketocarbonsäure. Sm. 41—42° (B. 35, 4346 C. 1903 [1] 287).  
 \*15) 5,6-Dioxy-2-Keto-1,2-Dihydrobenzofuran (Anhydroglykopyrogallol). Sm. 229°. Pb (B. 37, 817 C. 1904 [1] 1150).  
 $C_8H_6O_5$  \*4) 4-Oxybenzol-1,3-Dicarbonsäure. Sm. 305° (B. 37, 2122 C. 1904 [2] 438).  
 \*12) Benzol-1-Carbonsäure-2-Pericarbonsäure (Am. 29, 200 C. 1903 [1] 959).  
 13) 2,4-Dioxybenzol-1-Ketocarbonsäure. Sm. 194° (B. 36, 1949 C. 1903 [2] 296).  
 $C_8H_6O_6$  \*8) Dianhydrid d. isom. Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure (vom Sm. 236°). Sm. 168—169° (B. 36, 3295 C. 1903 [2] 1167).  
 $C_8H_6N_2$  \*2) 1,3-Benzodiazin. Sm. 48—48,5°; Sd. 243°<sub>779</sub>. (2HCl, PtCl<sub>4</sub>, (HCl, AuCl<sub>3</sub> +  $H_2O$ ) (B. 36, 808 C. 1903 [1] 978; B. 37, 3643 C. 1904 [2] 1512).  
 $C_8H_7N$  \*2) Indol (J. pr. [2] 66, 504 C. 1903 [1] 517; B. 37, 1134 C. 1904 [1] 1270; D.R.P. 152683 C. 1904 [2] 166).  
 \*4) Nitril d. 1-Methylbenzol-2-Carbonsäure (B. 36, 14 C. 1903 [1] 398).  
 \*6) Nitril d. 1-Methylbenzol-4-Carbonsäure. Sm. 28—29° (B. 36, 14 C. 1903 [1] 398).  
 $C_8H_8O$  \*3) Acetophenon (B. 36, 756 C. 1903 [1] 832; C. r. 136, 576 C. 1903 [2] 1110; C. 1904 [1] 1259).  
 \*4) 1,2-Dihydrobenzofuran (Cumaran). Sd. 188—190° (B. 36, 2876 C. 1903 [2] 834).  
 \*6) Aldehyd d. Phenylelessigsäure (C. r. 137, 989 C. 1904 [1] 257).  
 \*7) Aldehyd d. 1-Methylbenzol-2-Carbonsäure. Sd. 197° (C. r. 137, 717 C. 1903 [2] 1433; B. 36, 4152 C. 1904 [1] 273).  
 \*9) Aldehyd d. 1-Methylbenzol-4-Carbonsäure (C. r. 138, 94 C. 1904, [1] 509).  
 $C_8H_8O_2$  \*5) Oxymethylphenylketon. Sm. 84—85° (A. 325, 143 C. 1903 [1] 644).  
 \*14) 1-Methylbenzol-2-Carbonsäure. +  $H_2SO_4$  (R. 21, 351 C. 1903 [1] 150; Soc. 85, 241 C. 1904 [1] 1006).  
 \*15) 1-Methylbenzol-3-Carbonsäure. (NH<sub>4</sub>)H, KH (Soc. 83, 1443 C. 1904 [1] 510).  
 \*16) 1-Methylbenzol-4-Carbonsäure. +  $H_2SO_4$ , (NH<sub>4</sub>)H, KH (R. 21, 351, C. 1903 [1] 150; Soc. 83, 1443 C. 1904 [1] 510).  
 \*31) Aldehyd d. 2-Oxybenzoldimethyläther-1-Carbonsäure. Sm. 38° (B. 37, 2347 Anm. C. 1904 [2] 229).  
 \*33) Aldehyd d. 4-Oxybenzoldimethyläther-1-Carbonsäure (B. 37, 188 C. 1904 [1] 638).

- $C_8H_8O_2$  39) Pannarol. Sm. 176° (*J. pr.* [2] 68, 58 *C.* 1903 [2] 513).  
 $C_8H_8O_3$  \*4) Besacetophenon. Sm. 142° (*B.* 36, 735 *C.* 1903 [1] 840; *C.* 1904 [1] 1597).  
 \*9) Äthyläther d. 2-Oxy-1,4-Benzochinon. Sm. 117–119° (*B.* 35, 4194 *C.* 1903 [1] 145).  
 \*14) 3-Oxyphenyllessigsäure. Sm. 129° (*B.* 37, 2121 *C.* 1904 [2] 438).  
 \*17) 1-Oxymethylbenzol-2-Carbonsäure. Sm. 128° (*A.* 334, 359 *C.* 1904 [2] 1055).  
 \*30) 3-Oxybenzylmethyläther-1-Carbonsäure. Sm. 110° (*B.* 36, 1804 *C.* 1903 [2] 283).  
 \*31) 4-Oxybenzylmethyläther-1-Carbonsäure (*C. r.* 136, 378 *C.* 1903 [1] 636).  
 \*43) Vanillin. +  $H_2SO_4$  (*R.* 21, 356 *C.* 1903 [1] 151; *C.* 1904 [1] 586; *M.* 24, 836 *C.* 1904 [1] 367).  
 \*44) Aldehyd d. 3,4-Dioxybenzol-4-Methyläther-1-Carbonsäure (*M.* 24, 837 *C.* 1904 [1] 367).  
 55) Methyläther d. 6-Oxy-2-Methyl-1,4-Benzochinon. Sm. 147° (*B.* 36, 894 *C.* 1903 [1] 966).  
 $C_8H_8O_4$  \*1) Gallacetophenon. Na +  $H_2O$ , K, Ba (*Soe.* 83, 129 *C.* 1903 [1] 89, 466).  
 \*2) Dimethyläther d. 2,6-Dioxy-1,4-Benzochinon. Sm. 249° (*Ar.* 242, 507 *C.* 1904 [2] 1386).  
 \*4) 2,5-Dioxyphenyllessigsäure (*C.* 1903 [1] 1035; *H.* 37, 513 *C.* 1903 [1] 1235).  
 \*7)  $\alpha$ -Oxy- $\alpha$ -[2-Oxyphenyl]essigsäure (*B.* 36, 2580 *C.* 1903 [2] 621).  
 \*10) i-3,5-Dioxybenzol-1-Methylbenzol-4-Carbonsäure. Sm. 152° u. Zers. (*M.* 24, 894 *C.* 1904 [1] 512; *B.* 37, 1413 *C.* 1904 [1] 1417; *C. r.* 136, 1469 *C.* 1903 [2] 284; *C.* 1903 [2] 1330).  
 \*14) 3,5-Dioxy-1-Methylbenzol-2-Carbonsäure (Orsellinsäure). Zers. bei 175–176° (*B.* 37, 1414 *C.* 1904 [1] 1417; *Bl.* [3] 31, 613 *C.* 1904 [2] 99).  
 \*37) Dehydracetsäure (*B.* 37, 3387 *C.* 1904 [2] 1220).  
 52) 2,3,5,6-Tetraoxy-1,4-Dimethylbenzol. Sm. 245° (*B.* 37, 2388 *C.* 1904 [2] 308).  
 53) 2,5-Dioxy-1-Methylbenzol-3-Carbonsäure. Sm. 215° (D.R.P. 81297). — \*II, 1033.  
 54) 2,6-Dioxy-1-Methylbenzol-3-Carbonsäure. Sm. 185° u. Zers. (*M.* 24, 908 *C.* 1904 [1] 513).  
 55) 4,5-Dioxy-1-Methylbenzol-3-Carbonsäure. Sm. 204° (D.R.P. 81298). — \*II, 1031.  
 56) 2,5-Dioxy-1-Methylbenzol-4-Carbonsäure. Sm. 205° (D.R.P. 81297). — \*II, 1033.  
 57) Aldehyd d. 2,4,6-Trioxy-1-Methylbenzol-3-Carbonsäure +  $\frac{1}{2}H_2O$ . Zers. bei 130° (*M.* 24, 876 *C.* 1904 [1] 368).  
 58) Aldehyd d. 2,4,6-Trioxybenzol-4-Methyläther-1-Carbonsäure. Zers. bei 170° (*M.* 24, 862 *C.* 1904 [1] 367).  
 $C_8H_8O_5$  \*18) 3,4,5-Trioxybenzol-4-Methyläther-1-Carbonsäure. Sm. 240° (*B.* 36, 216 *C.* 1903 [1] 455).  
 21) Oxyessig-2,3-Dioxyphenyläthersäure (Pyrogallolmonoglykolsäure). Sm. 153–154° (D.R.P. 155568 *C.* 1904 [2] 1443).  
 22) 2-Acetoxydimethylfuran-5-Carbonsäure. Sm. 115–117° (*B.* 36, 2590 *C.* 1903 [2] 617).  
 23) 1-Methylcarbonat d. 1,2,3-Trioxybenzol. Sm. 120° (*B.* 37, 108 *C.* 1904 [1] 584).  
 $C_8H_8O_6$  7) Gem. Anhydrid d. Essigsäure u. d.  $\alpha$ -Keto- $\gamma$ -Oxybutan- $\alpha\gamma$ -Dicarbonsäure- $\alpha\gamma$ -Lakton. Sm. 112–113° (*R.* 22, 283 *C.* 1903 [2] 107).  
 $C_8H_8O_7$  \*1) Monoanhydrid d. Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure (vom Sm. 236°). Sm. 168–169° (*B.* 36, 3295 *C.* 1903 [2] 1167).  
 $C_8H_8N_2$  \*10) 3,4-Dihydro-1,3-Benzodiazin. Sm. 126–127°; Sd. 303–304°<sub>780</sub>. ( $2HCl$ ,  $ZnCl_2$ ) (*B.* 36, 807 *C.* 1903 [1] 978; *B.* 37, 3645 *C.* 1904 [2] 1512).  
 \*12) Nitril d. Phenylamidoessigsäure. Sm. 43° (48°) (D.R.P. 142559 *C.* 1903 [2] 81; D.R.P. 151538 *C.* 1904 [1] 1308; *B.* 37, 4081 *C.* 1904 [2] 1723).

- $C_6H_5N_2$  \*16) Nitril d. 4-Amidophenyllessigsäure. Sm.  $46^\circ$  (B. 35, 4403 C. 1903 [1] 341).  
 28) Nitril d. 4-Methylamidobenzol-1-Carbonsäure. Sm.  $85-86^\circ$  (B. 37, 1741 C. 1904 [1] 1599).  
 29) Nitril d. 6-Amido-1-Methylbenzol-2-Carbonsäure. Sm.  $95,5^\circ$  (B. 37, 1025 C. 1904 [1] 1203).
- $C_6H_5N_4$  \*7) 2,3-Diamido-1,4-Benzodiazin (B. 36, 4039 C. 1904 [1] 182).  
 10)  $\alpha$ -Amido- $\alpha$ -Cyanamido- $\alpha$ -Phenylimidomethan (Phenyleyanguanidin). Sm.  $190-191^\circ$  (C. 1903 [2] 662).  
 11) 5-Amido-1-Phenyl-1,2,3-Triazol. Sm.  $139^\circ$  (B. 35, 4060 C. 1903 [1] 171).  
 12) Nitril d. Methylphenylamidoazoameisensäure (2-Phenyl-2-Methyl-1-Cyantriazin). Sm.  $69-70^\circ$  (B. 37, 2379 C. 1904 [2] 322).
- $C_6H_5Cl_2$  \*3)  $\beta\beta$ -Dichloräthylbenzol. Sd.  $210-220^\circ_{760}$  (B. 36, 3910 C. 1903 [2] 1439).  
 17) 4-Dichlormethyl-1-Methylbenzol. Sm.  $48-49^\circ$  (B. 36, 1875 C. 1903 [2] 286).  
 18) 3,5-Dichlor-1,2-Dimethylbenzol. Sm.  $3-4^\circ$ ; Sd.  $226^\circ_{760}$  (Soc. 81, 1534 C. 1903 [1] 21, 140).
- $C_6H_5O$  1) Verbindung (aus 2-Oxy-1,3-Dimethylbenzol). Sm.  $175-176^\circ$  (B. 36, 2037 C. 1903 [2] 360).
- $C_6H_5N$  15) 1,4-Anhydrid d. 4-Methylamido-1-Oxymethylbenzol. HCl (M. 23, 987 C. 1903 [1] 289).
- $C_6H_5N_3$  11) 7-Amido-6-Methylindazol. Sm.  $194^\circ$  (B. 37, 2592 C. 1904 [2] 660).
- $C_6H_5Cl$  \*12) 2-Chlor-1,4-Dimethylbenzol. Sd.  $186^\circ$  (C. r. 135, 1121 C. 1903 [1] 283).
- $C_6H_5Br$  13)  $\beta$ -Bromäthylbenzol. Sd.  $217-218^\circ_{734}$  (C. r. 138, 1049 C. 1904 [1] 1493).
- $C_6H_5J$  \*6) 2-Jod-1,4-Dimethylbenzol. Sd.  $230^\circ_{722}$  (A. 332, 46 C. 1904 [2] 40).  
 \*8) 4-Jod-1-Aethylbenzol. Sd.  $209^\circ_{736}$  (A. 327, 287 C. 1903 [2] 351).
- $C_8H_{10}O$  \*1)  $\alpha$ -Oxyäthylbenzol (B. 37, 2085 C. 1904 [2] 182).  
 \*2)  $\beta$ -Oxyäthylbenzol. Sd.  $212-215^\circ$  (J. pr. [2] 66, 509 C. 1903 [1] 517; C. r. 138, 150 C. 1904 [1] 577).  
 \*6) 2-Oxymethyl-1-Methylbenzol. Sm.  $35^\circ$ ; Sd.  $219^\circ$  (Bl. [3] 29, 953 C. 1903 [2] 1117; C. r. 137, 574 C. 1903 [2] 1117).  
 \*12) 2-Oxy-1,3-Dimethylbenzol. Sm.  $49^\circ$  (B. 36, 2036 C. 1903 [2] 360).  
 \*15) 2-Oxy-1,4-Dimethylbenzol. Sm.  $74^\circ$  (C. 1903 [2] 1051).  
 \*17) Methyläther d. Oxymethylbenzol. Sd.  $170^\circ$  ( $168^\circ$ ) (C. r. 138, 814 C. 1904 [1] 1195; B. 37, 3191 C. 1904 [2] 1109; B. 37, 3695 C. 1904 [2] 1387).  
 \*19) Methyläther d. 3-Oxy-1-Methylbenzol. Sd.  $178^\circ$  (R. 21, 331 C. 1903 [1] 78).  
 \*20) Methyläther d. 4-Oxy-1-Methylbenzol. Sd.  $174-176^\circ$  (Am. 31, 26 C. 1904 [1] 441).
- $C_8H_{10}O_2$  \*31) 3-Methyläther d. 3,5-Dioxy-1-Methylbenzol (B. 36, 889 C. 1903 [1] 965).  
 \*32) Dimethyläther d. 1,2-Dioxybenzol. Sd.  $205-206^\circ$ . Pikrat (B. 37, 2150 C. 1904 [2] 207).  
 \*33) Dimethyläther d. 1,3-Dioxybenzol. Sd.  $214^\circ$  (A. 327, 116 C. 1903 [1] 1214; B. 37, 2152 C. 1904 [2] 207).  
 \*34) Dimethyläther d. 1,4-Dioxybenzol (A. 327, 116 C. 1903 [1] 1214).  
 \*46) 1-Oxy-4-Keto-1,3-Dimethyl-1,4-Dihydrobenzol. Sm.  $54^\circ$  ( $74^\circ$  wasserfrei) (B. 35, 3891 C. 1903 [1] 26; B. 36, 2032 C. 1903 [2] 360).  
 55) 3,4-Dioxy-1-Aethylbenzol. Sm.  $39^\circ$ ; Sd.  $157-160^\circ_{19}$  (C. r. 138, 1702 C. 1904 [2] 436).  
 56) 3,5-Dioxy-1,2-Dimethylbenzol +  $H_2O$ . Sm.  $136-137^\circ$  (wasserfrei) (A. 329, 305 C. 1904 [1] 793).  
 57) 1-Oxy-4-Keto-1,2-Dimethyl-1,4-Dihydrobenzol (B. 36, 1626 C. 1903 [2] 31).
- $C_8H_{10}O_3$  \*2) 2,4,6-Trioxy-1,3-Dimethylbenzol. Sm.  $164^\circ$  (A. 329, 279 C. 1904 [1] 796).  
 \*4) 2-Methyläther d. 2,4,6-Trioxy-1-Methylbenzol +  $H_2O$  (A. 329, 275 C. 1904 [1] 795).  
 \*6) 1,3-Dimethyläther d. 1,2,3-Trioxybenzol. Sm.  $55^\circ$ ; Sd.  $262,5^\circ$  (B. 36, 1032 C. 1903 [1] 1223).

- $C_8H_{10}O_3$  \*9) Monoäthyläther d. 1,2,3-Trioxybenzol. Sm. 102—104° (*Soc.* 83, 133 *C.* 1903 [1] 466).
- \*29) Filicinsäure (*A.* 329, 289 *C.* 1904 [1] 796).
- 35) 3-Methyläther d. 2,3,5-Trioxy-1-Methylbenzol. Sm. 128—129° (*B.* 36, 895 *C.* 1903 [1] 966).
- 36) 1,2-Dimethyläther d. 1,2,3-Trioxybenzol. Sd. 232—234°. Pikrat (*B.* 36, 861 *C.* 1903 [1] 710; *M.* 25, 513 *C.* 1904 [2] 1118).
- 37) Anhydrid d.  $\beta$ -Hexen- $\beta\gamma$ -Dicarbonsäure. Sd. 241—242° (*B.* 37, 2470 *C.* 1904 [2] 305).
- 38) Anhydrid d. cis- $\delta$ -Methyl- $\beta$ -Penten- $\beta\delta$ -Dicarbonsäure. Sm. 88° (*Soc.* 83, 777 *C.* 1903 [2] 191, 423; *Soc.* 85, 157 *C.* 1904 [1] 720).
- 39) Anhydrid d. Crotonsäure. Sd. 128—130°<sub>15</sub> (*Am.* 29, 194 *C.* 1903 [1] 959).
- 40) Anhydrid d. Säure  $C_8H_{12}O_4$ . Sm. 66° (*C. r.* 136, 693 *C.* 1903 [1] 960).
- $C_8H_{10}O_4$  \*10) 1,2,3,4-Tetrahydrobenzol-2,5-Dicarbonsäure (*Soc.* 85, 437 *C.* 1904 [1] 1440).
- 38) Peroxyd d. Crotonsäure. Sm. 41° (*Am.* 29, 195 *C.* 1903 [1] 959).
- $C_8H_{10}O_8$  \*3) isom. Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure. Sm. 236—237°.  $Ag_4$  (*B.* 36, 3295 *C.* 1903 [2] 1167).
- 11) Diformalchleimsäure. Sm. 160° (*R.* 21, 319 *C.* 1903 [1] 138).
- 12) Diformalzuckersäure. Sm. 103° (*R.* 21, 316 *C.* 1903 [1] 137).
- 13) Succinperoxyd. Sm. 128° u. Zers. (*Am.* 32, 55 *C.* 1904 [2] 765).
- $C_8H_{10}N_2$  \*5)  $\alpha$ -Äthyliden- $\beta$ -Phenylhydrazin.  $\alpha$ -Modif. Sm. 98—100°;  $\beta$ -Modif. Sm. 62—64° (*B.* 36, 56 *C.* 1903 [1] 450; *B.* 36, 88 *C.* 1903 [1] 452).
- \*9) 1,2,3,4-Tetrahydro-1,3-Benzodiazin +  $H_2O$ . Sm. 49—51° (81°; 76° wasserfrei) (*B.* 36, 811 *C.* 1903 [1] 978).
- 17) Methyl-2-Amidobenzylidenamin. Fl. (*B.* 37, 3654 *C.* 1904 [2] 1514).
- 18) 2-Methylbenzylidenhydrazin. Sm. 97° (*C. r.* 137, 717 *C.* 1903 [2] 1433).
- $C_8H_{11}N$  \*1) Äthylamidobenzol. Oxalat (*B.* 36, 203 *C.* 1903 [1] 507; *C. r.* 138, 1038 *C.* 1904 [1] 1490).
- \*2) i- $\alpha$ -Amidoäthylbenzol (*B.* 36, 704 *C.* 1903 [1] 818).
- \*6) 4-Amido-1-Äthylbenzol (*A.* 327, 286 *C.* 1903 [2] 351).
- \*7) Dimethylamidobenzol. Oxalat (*M.* 25, 384 Anm. *C.* 1904 [2] 320).
- \*18) 4-Amido-1,3-Dimethylbenzol. ( $HBr$ ,  $Br_2$ ), (2  $HBr$ ,  $Br_2$ ) (*C. r.* 138, 1038 *C.* 1904 [1] 1490; *B.* 37, 2344 *C.* 1904 [2] 433).
- \*31) 2,4,6-Trimethylpyridin. ( $HCl$ ,  $AuCl_3$  +  $H_2O$ ) (*B.* 36, 2130 *C.* 1903 [2] 365; *Soc.* 83, 763 *C.* 1903 [2] 443).
- \*42) d- $\alpha$ -Amidoäthylbenzol. d-Bromcamphersulfonat (*Soc.* 83, 1147 *C.* 1903 [2] 1061).
- 45) l- $\alpha$ -Amidoäthylbenzol. d-Chlorcamphersulfonat, d-Bromcamphersulfonat (*Soc.* 83, 1147 *C.* 1903 [2] 1061).
- $C_8H_{11}N_3$  7) 4-Methylphenylguanidin.  $HNO_3$  (*B.* 37, 1683 *C.* 1904 [1] 1491).
- $C_8H_{11}Br$  2) Verbindung (aus d. Verb.  $C_8H_{13}OBr_3$ ). Sd. 165—167° (*Soc.* 83, 859 *C.* 1903 [2] 573).
- $C_8H_{12}O$  13) Ketobicyklo[1,2,3]oktan. Sm. 157—158° (*B.* 36, 3612 *C.* 1903 [2] 1372).
- $C_8H_{12}O_2$  \*32) 3-Keto-4-Oxymethylen-1-Methylhexahydrobenzol. Sd. 85°<sub>12</sub> (*A.* 329, 119 *C.* 1903 [2] 1322).
- \*33)  $\alpha$ -Heptin- $\alpha$ -Carbonsäure.  $Ba$  +  $H_2O$ , Phenylhydrazinsalz (*C. r.* 136, 553 *C.* 1903 [1] 824).
- \*35) 5-Methyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sm. 99° (*Soc.* 85, 663 *C.* 1904 [2] 330).
- \*40) Laktone d. cis-1-Oxy-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 70°; Sd. 185°<sub>150</sub> (*Soc.* 85, 660 *C.* 1904 [2] 330).
- 42) 2-Keto-1-Oxymethylen-R-Heptamethylen (Oxymethylensuberon). Sd. 100°<sub>10</sub> (*A.* 329, 128 *C.* 1903 [2] 1323).
- 43)  $\beta\delta$ -Heptadien- $\epsilon$ -Carbonsäure. Sm. 75—77°.  $Cu$ ,  $Ag$  (*C.* 1902 [2] 1409; 1903 [2] 556).
- 44)  $\beta\delta$ -Dimethyl- $\alpha\gamma$ -Pentadien- $\alpha$ -Carbonsäure. Sm. 93° (*B.* 36, 15 *C.* 1903 [1] 387).
- 45)  $\epsilon$ -Methyl- $\alpha$ -Hexin- $\alpha$ -Carbonsäure. Sm. 0°; Sd. 141—144°<sub>10</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).

- $C_8H_{12}O_2$  46) 1,1-Dimethyl-2,3-Dihydro-R-Penten-2-Carbonsäure. *Sd.* 236°<sub>760</sub> (*Soc.* 85, 142 *C.* 1904 [1] 728).  
 47) Methylester d.  $\alpha$ -Hexin- $\alpha$ -Carbonsäure. *Sd.* 91—93°<sub>19</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).  
 48) Methylester d.  $\gamma\gamma$ -Dimethyl- $\alpha$ -Butin- $\alpha$ -Carbonsäure. *Sd.* 66°<sub>18</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).  
 49) Aethylester d.  $\alpha$ -Pentin- $\alpha$ -Carbonsäure. *Sd.* 93—94°<sub>24</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).  
 50) Aethylester d.  $\gamma$ -Methyl- $\alpha$ -Butin- $\alpha$ -Carbonsäure. *Sd.* 83°<sub>19</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).  
 $C_8H_{12}O_3$  51) Acetat d. Verb.  $C_8H_{10}O_3$ . *Sd.* 190—195° (*C. r.* 137, 1205 *C.* 1904 [1] 356).  
 \*15) Anhydrid d.  $\beta\gamma$ -Dimethylbutan- $\beta\gamma$ -Dicarbonsäure. *Sm.* 147° (*Soc.* 85, 554 *C.* 1904 [1] 1485).  
 30)  $\beta$ -Hepten- $\gamma\zeta$ -Oxyd- $\alpha$ -Carbonsäure (Valaktenpropionsäure). *Sd.* 253 bis 255° u. Zers. Ca, Ba, Ag (*A.* 331, 194 *C.* 1904 [1] 1213).  
 31) 5-Keto-1,1-Dimethyl-R-Pentamethylen-2-Carbonsäure. *Sm.* 110° (*C.* 1903 [1] 923; *Soc.* 85, 139 *C.* 1904 [1] 728).  
 32) Anhydrid d. 1- $\beta$ -Methylpentan- $\gamma\delta$ -Dicarbonsäure. *Sd.* 155—160°<sub>10</sub> (*B.* 36, 1751 *C.* 1903 [2] 117).  
 33) Methylester d. 4-Ketohexahydrobenzol-1-Carbonsäure. *Sd.* 140°<sub>20</sub> (*Soc.* 85, 426 *C.* 1904 [1] 1439).  
 $C_8H_{12}O_4$  \*15) trans- $\beta\gamma$ -Dimethyl- $\alpha$ -Buten- $\alpha\gamma$ -Dicarbonsäure. *Sm.* 148° (*Soc.* 83, 773 *C.* 1903 [2] 423).  
 \*16) cis- $\beta\gamma$ -Dimethyl- $\alpha$ -Buten- $\alpha\gamma$ -Dicarbonsäure. *Sm.* 133° (*Soc.* 83, 773 *C.* 1903 [2] 423).  
 \*21) i-trans-Hexahydrobenzol-1,2-Dicarbonsäure. *Sm.* 221° (*C.* 1904 [2] 1697).  
 \*24) cis-Hexahydrobenzol-1,4-Dicarbonsäure. *Sm.* 160—162° (*B.* 36, 2860 *C.* 1903 [2] 1129).  
 \*25) trans-Hexahydrobenzol-1,4-Dicarbonsäure. *Sm.* 297—308° (*B.* 36, 2860 *C.* 1903 [2] 1129).  
 \*43) Terpenylsäure. *Sm.* 89° (*G.* 33 [1] 400 *C.* 1903 [2] 571).  
 \*56) Aethylester d.  $\beta$ -Acetoxylpropen- $\alpha$ -Carbonsäure (*B.* 37, 3395 *C.* 1904 [2] 1221).  
 \*76)  $\beta$ -Hexen- $\beta\gamma$ -Dicarbonsäure. Ba +  $H_2O$  (*B.* 37, 2471 *C.* 1904 [2] 305).  
 86) cis- $\delta$ -Methyl- $\beta$ -Penten- $\beta\delta$ -Dicarbonsäure. *Sm.* 125° u. Zers. (*Soc.* 85, 157 *C.* 1904 [1] 720).  
 87) trans- $\delta$ -Methyl- $\beta$ -Penten- $\beta\delta$ -Dicarbonsäure (trans- $\alpha\alpha\gamma$ -Trimethylglutakonsäure). *Sm.* 150° (*Soc.* 83, 777 *C.* 1903 [2] 191, 423; *C. r.* 136, 1140 *C.* 1903 [1] 1405; *Bl.* [3] 29, 1023 *C.* 1903 [2] 1315).  
 88) Säure (aus Glutakonylglutakonsäuretriäthylester) (*C. r.* 136, 693 *C.* 1903 [1] 960).  
 89)  $\alpha\gamma$ -Lakton d.  $\gamma$ -Oxybutan- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Aethylester. *Sd.* 273—273,5° (*A.* 330, 306 *C.* 1904 [1] 927; *B.* 37, 1997 *C.* 1904 [2] 23).  
 90)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxybutan- $\beta\gamma$ -Dicarbonsäure- $\beta$ -Aethylester ( $\alpha$ -Methylparakonsäureäthylester). *Sd.* 145—150°<sub>14</sub> (*B.* 37, 1613 *C.* 1904 [1] 1402).  
 91) Lakton d.  $\alpha$ -Oxy- $\beta$ -Isopropylpropan- $\alpha\gamma$ -Dicarbonsäure (*B.* 36, 1750 *C.* 1903 [2] 116).  
 92) Lakton d.  $\gamma$ -Oxy- $\alpha$ -Acetoxyl- $\beta\beta$ -Dimethylpropan- $\alpha$ -Carbonsäure? *Sd.* 122—125°<sub>11</sub> (*M.* 25, 51 *C.* 1904 [1] 717).  
 93) Isobutylester d.  $\alpha\beta$ -Diketobuttersäure. *Sd.* 96—100°<sub>18</sub>. +  $\frac{1}{2}H_2O$  (*Sm.* 96°) (*C. r.* 138, 1222 *C.* 1904 [2] 27).  
 $C_8H_{12}O_6$  \*11) Diäthylester d. Oxalessigsäure (*C. r.* 138, 1505 *C.* 1904 [2] 422).  
 25) cis-1-Oxyhexahydrobenzol-1,4-Dicarbonsäure. *Sm.* 168—170° (*Soc.* 85, 436 *C.* 1904 [1] 1082, 1440).  
 26) trans-1-Oxyhexahydrobenzol-1,4-Dicarbonsäure. *Sm.* 228—230° (*Soc.* 85, 435 *C.* 1904 [1] 1082, 1440).  
 27)  $\alpha$ -Oxy- $\alpha$ -Butenäthyläther- $\beta\gamma$ -Dicarbonsäure. *Sm.* 151° (*B.* 37, 1614 *C.* 1904 [1] 1402).  
 28)  $\beta\delta$ -Lakton d.  $\gamma$ -Oxy- $\beta$ -Oxymethyl- $\beta$ -Methylbutan- $\delta\delta$ -Dicarbonsäure. *Sm.* 82° (*M.* 25, 15 *C.* 1904 [1] 719).  
 $C_8H_{12}O_6$  \*3) Pentan- $\alpha\gamma\delta$ -Tricarbonsäure. *Sm.* 116—118° (*Soc.* 85, 423 *C.* 1904 [1] 1439).  
 24) Formalmethylenfruktosid. *Sm.* 92° (*R.* 22, 163 *C.* 1903 [2] 108).

- $C_8H_{12}O_6$  25) Formalmethylen-d-Sorboseid. Sm.  $54^\circ$  (*R.* 22, 164 *C.* 1903 [2] 109).  
 26) Formalmethylen-l-Sorboseid. Sm.  $54^\circ$  (*R.* 22, 164 *C.* 1903 [2] 109).  
 27) Formalmethylen-i-Sorboseid. Sd.  $81^\circ$  (*R.* 22, 164 *C.* 1903 [2] 109).  
 28)  $\beta$ -Methylbutan- $\alpha\alpha$ -Tricarbonsäure. Sm.  $127$ – $128^\circ$  u. Zers. Ca +  $H_2O$  (*C.* 1903 [2] 1425).  
 29)  $\beta$ -Methylbutan- $\alpha\gamma\gamma$ -Tricarbonsäure Sm.  $165^\circ$  u. Zers. (*Soc.* 83, 358 *C.* 1903 [1] 389, 1122).
- $C_8H_{12}N_2$  \*24) uns-Aethylphenylhydrazin (*C.* 1903 [1] 1128).  
 42) 2-Amido-4-Amidomethyl-1-Methylbenzol. Fl. (*C.* 1904 [2] 200).  
 43) Crotonaldazin. Sm.  $96^\circ$  (*M.* 24, 439 *C.* 1903 [2] 617).  
 44) R-Heptamethylenpyrazol (Suberonpyrazol). Sm.  $66$ – $67^\circ$ . (2 HCl, PtCl<sub>4</sub>) (*A.* 329, 129 *C.* 1903 [2] 1323).  
 45) Pyrazol (aus 3-Semicarbazol-4-Oxymethylen-1-Methylhexahydrobenzol). Sm.  $99$ – $100^\circ$ . HCl, Pikrat, Ag (*A.* 329, 120 *C.* 1903 [2] 1322).  
 46) 2-[ $\beta$ -Methylamidoäthyl]pyridin. Sd.  $113$ – $114^\circ_{80}$ . (2 HCl, PtCl<sub>4</sub> +  $H_2O$ ), (2 HCl, AuCl<sub>3</sub>), Pikrat (*B.* 37, 169 *C.* 1904 [1] 672).  
 47) 2,5-Diäthyl-1,4-Diazin. Sd.  $185,5$ – $186^\circ_{78}$ . + 2 HgCl<sub>2</sub>, (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 37, 2478 *C.* 1904 [2] 419).  
 48) Nitril d. Hexan- $\alpha\zeta$ -Dicarbonsäure. Sm.  $-3,5^\circ$ ; Sd.  $185,16$  (*C. r.* 136, 246 *C.* 1903 [1] 583).
- $C_8H_{12}Br_2$  2) Verbindung (aus d. Verb.  $C_8H_{12}OBr_2$ ). Sd.  $218$ – $220^\circ$  (*Soc.* 83, 859 *C.* 1903 [2] 573).
- $C_8H_{12}O$  1) Verbindung (aus Guttapercha). =  $(C_8H_{12}O)_x$  (*C.* 1903 [1] 84).  
 $C_8H_{12}N$  \*9) Tropidin (*A.* 326, 20, 28 *C.* 1903 [1] 778).  
 \*14) Hämapyrrol (*B.* 37, 2472 *C.* 1904 [2] 306).  
 16) 2,5-Dimethyl-1-Aethylpyrrol (*C.* 1903 [2] 1281).
- $C_8H_{14}O$  \*1)  $\delta$ -Oxy- $\delta$ -Methyl- $\alpha\zeta$ -Heptadien (*C.* 1903 [2] 1415).  
 \*7)  $s$ -Keto- $\gamma$ -Methyl- $\gamma$ -Hepten. Sd.  $166^\circ$  (*C.* 1903 [2] 656).  
 \*18) Aldehyd d.  $\gamma$ -Hepten- $\gamma$ -Carbonsäure. Sd.  $172$ – $174^\circ$  (*M.* 25, 337 *C.* 1904 [1] 1400).  
 \*28) isom. Ketodimethylhexahydrobenzol. Sd.  $169$ – $170^\circ_{79}$  (*B.* 36, 954 *C.* 1903 [1] 1022).  
 30) Aethyläther d. 1-Oxy-1,2,3,4-Tetrahydrobenzol. Sd.  $155^\circ$  (*C.* 1904 [2] 440; *Soc.* 85, 1416 *C.* 1904 [2] 1736).  
 31)  $\gamma$ -Keto- $\beta\delta$ -Trimethyl- $\alpha$ -Penten. Sd.  $137$ – $139^\circ_{754}$  (*C.* 1904 [2] 1025).  
 32) Methylhexahydrophenylketon. Sd.  $68^\circ_{13}$  (*Bl.* [3] 29, 1051 *C.* 1903 [2] 1437).  
 33) r-5-Keto-1,1,2-Trimethyl-R-Pentamethylen. Sd.  $164^\circ$  (*C. r.* 136, 1143 *C.* 1903 [1] 1410).  
 34) 2-Keto-1,1,3-Trimethyl-R-Pentamethylen. Fl. (*A.* 329, 94 *C.* 1903 [2] 1071).  
 35) Aldehyd d. 1-Methylhexahydrobenzol-3-Carbonsäure. Sd.  $176$ – $178^\circ$  (*B.* 37, 852 *C.* 1904 [1] 1146).  
 36) Verbindung (aus  $\alpha\gamma$ -Dioxybutan). Sd.  $175$ – $185^\circ$  u. Zers. (*M.* 25, 7 *C.* 1904 [1] 716).
- $C_8H_{14}O_2$  \*11)  $s$ -Methyl- $\beta$ -Hexen- $\alpha$ -Carbonsäure. Sd.  $229$ – $232^\circ$ . Ag (*A.* 331, 148 *C.* 1904 [1] 933).  
 \*51)  $\delta s$ -Diketooktan. Sd.  $166$ – $169^\circ_{755}$  (*Bl.* [3] 31, 1175 *C.* 1904 [2] 1701).  
 \*52)  $\delta\zeta$ -Diketo- $\beta$ -Methylheptan (Isovalerylaceton). Sd.  $76^\circ_{19}$ . Cu (*Bl.* [3] 27, 1085 *C.* 1903 [1] 225).  
 63)  $\delta s$ -Diketo- $\beta$ -Methylheptan. Sd.  $59$ – $60^\circ_{18}$  (*Bl.* [3] 31, 1176 *C.* 1904 [2] 1701).  
 64)  $\beta\delta$ -Diketo- $\gamma$ -Methylheptan (Methylbutyrylaceton). Sd.  $89$ – $90^\circ_{20}$  (*Bl.* [3] 27, 1087 *C.* 1903 [1] 225).  
 65) Säure (aus Naphta). Sd.  $129$ – $130^\circ_{14}$  (*D. R. P.* 150880 *C.* 1904 [2] 70).
- $C_8H_{14}O_3$  \*29) Aethylester d. Aethylacetessigsäure (*B.* 36, 4290 *C.* 1904 [1] 459).  
 \*47) Aethylester d.  $\gamma$ -Keto- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sd.  $86$ – $87^\circ_{15}$  (*C. r.* 136, 754 *C.* 1903 [1] 1019).  
 \*51)  $\delta$ -Oxy- $\beta$ -Hepten- $s$ -Carbonsäure. Fl. Ag (*C.* 1903 [2] 556).  
 \*53)  $\delta$ -Oxy- $s$ -Methyl- $\beta$ -Hexen- $s$ -Carbonsäure. Fl. Na + 5  $H_2O$ , Ag (*C.* 1903 [2] 556).  
 \*54) cis-1-Oxy-1-Methylhexahydrobenzol-4-Carbonsäure. Sm.  $153^\circ$  (*Soc.* 85, 661 *C.* 1904 [2] 330).

- $C_8H_{14}O_3$  \*58)  $\beta$ -Ketoheptan- $\alpha$ -Carbonsäure. Sm. 73—74° (*C. r.* 136, 755 *C.* 1903 [1] 1019; *Bl.* [3] 31, 597 *C.* 1904 [2] 26).  
 \*59) Methylester d.  $\gamma$ -Ketoheptan- $\beta$ -Carbonsäure (M. d. Methylbutyrylessigsäure). Sd. 89—90°<sub>18</sub> (*Bl.* [3] 27, 1101 *C.* 1903 [1] 227).  
 \*60) Methylester d.  $\delta$ -Keto- $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. Cu (*Bl.* [3] 27, 1092 *C.* 1903 [1] 226).  
 \*61) Aethylester d.  $\delta$ -Oxy- $\beta$ -Penten- $\epsilon$ -Carbonsäure. Sd. 100°<sub>2</sub> (*C.* 1903 [2] 555).  
 \*63) Aethylester d.  $\beta$ -Ketopentan- $\alpha$ -Carbonsäure. Sd. 94—96°<sub>15</sub>. Cu (*C. r.* 136, 754 *C.* 1903 [1] 1019).  
 64)  $\epsilon$ -Keto- $\beta$ -Methylhexan- $\beta$ -Carbonsäure. Sm. 49—50°. Ag<sub>2</sub> (*A.* 329, 93 *C.* 1903 [2] 1071).  
 65) trans-5-Oxy-1,1-Dimethyl-R-Pentamethylen-2-Carbonsäure. Sm. 100—101° (*Soc.* 85, 140 *C.* 1904 [1] 728).  
 66) Aethylester d.  $\delta$ -Keto- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sd. 93°<sub>25</sub>. (*Bl.* [3] 31, 1151 *C.* 1904 [2] 1707).
- $C_8H_{14}O_4$  \*8) Korksäure (*C.* 1903 [2] 1330).  
 \*17)  $\beta$ -Methylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 98° (*Soc.* 83, 779 *C.* 1903 [2] 191, 423).  
 \*21)  $\beta$ -Methylpentan- $\gamma\epsilon$ -Dicarbonsäure. Sm. 94—95°. Ag<sub>2</sub> (*A.* 327, 139 *C.* 1903 [1] 1412).  
 \*24)  $\beta$ -Methylpentan- $\epsilon\epsilon$ -Dicarbonsäure. Sm. 98° (*C.* 1904 [1] 879).  
 \*27)  $\beta\beta$ -Dimethylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 86—87° (*C. r.* 138, 580 *C.* 1904 [1] 925).  
 \*39) Dimethylester d.  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sd. 201—202° (*Soc.* 85, 548 *C.* 1904 [1] 1485).  
 \*46) Diäthylester d. Aethan- $\alpha\alpha$ -Dicarbonsäure. Sd. 196—197° (*A.* 325, 145 *C.* 1903 [1] 644).  
 69) 1- $\beta$ -Methylpentan- $\gamma\epsilon$ -Dicarbonsäure. Sm. 94—95° (*B.* 36, 1752. *C.* 1903 [2] 117).  
 70)  $\gamma$ -Methylpentan- $\alpha\delta$ -Dicarbonsäure. Sm. 80°; Sd. 214—216°<sub>18</sub>. Cu + H<sub>2</sub>O, Ag<sub>2</sub> (*C.* 1903 [2] 1425; *C. r.* 138, 210 *C.* 1904 [1] 663).  
 71)  $\beta$ -Aethylbutan- $\alpha\alpha$ -Dicarbonsäure. Sm. 52—53° (*Bl.* [3] 31, 350 *C.* 1904 [1] 1134).  
 72)  $\gamma$ -Methylester d.  $\beta$ -Methylbutan- $\beta\gamma$ -Dicarbonsäure (*Soc.* 85, 553 *C.* 1904 [1] 1485).  
 73)  $\beta$ -Methylester d.  $\beta$ -Methylbutan- $\beta\gamma$ -Dicarbonsäure (*Soc.* 85, 551 *C.* 1904 [1] 1485).  
 74) Methylester d.  $\alpha$ -Acetoxyl- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sd. 191 bis 192°<sub>737</sub> (*Bl.* [3] 31, 125 *C.* 1904 [1] 644).  
 75) Dimethylester d. Butan- $\alpha\delta$ -Dicarbonsäure. Sd. 115°<sub>13</sub> (*Bl.* [3] 29, 1043, 1046 *C.* 1903 [2] 1424).
- $C_8H_{14}O_6$  \*11)  $\alpha$ -Oxy- $\beta$ -Isopropylpropan- $\alpha\gamma$ -Dicarbonsäure (*B.* 36, 1750 *C.* 1903 [2] 116).  
 35) cis- $\gamma$ -Oxy- $\beta$ -Methylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 115° (*Soc.* 83, 776 *C.* 1903 [2] 191, 423).  
 36) trans- $\gamma$ -Oxy- $\beta$ -Methylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 154—156° (*Soc.* 83, 776 *C.* 1903 [2] 190, 422).  
 37)  $\gamma$ -Oxybutanäthyläther- $\alpha\beta$ -Dicarbonsäure. Fl. Ca + H<sub>2</sub>O, Ba, Ag<sub>2</sub> (*A.* 330, 309 *C.* 1904 [1] 927).
- $C_8H_{14}O_6$  \*10) Diäthylester d. d-Weinsäure (*Soc.* 85, 766 *C.* 1904 [2] 512).  
 22)  $\gamma$ -Oxy- $\beta$ -Oxymethyl- $\beta$ -Methylbutan- $\delta\delta$ -Dicarbonsäure. Ca (*M.* 25, 16 *C.* 1904 [1] 719).
- $C_8H_{14}N_2$  9) 3,4-Dimethyl-5-Propylisopirazol? Sd. 148—149°<sub>25</sub> (*Bl.* [3] 27, 1105 *C.* 1903 [1] 228).  
 10) Nitril d.  $\alpha$ -[1-Piperidyl]propionsäure. Sd. 93—94°<sub>12,5</sub> (*B.* 37, 4086 *C.* 1904 [2] 1724).
- $C_8H_{14}N_4$  3) Nitril d. Aethylidendi[ $\alpha$ -Amidopropionsäure]. Sm. 74—75° (*Bl.* [3] 29, 1187 *C.* 1904 [1] 354).
- $C_8H_{10}N$  \*14) d- $\alpha$ -Conicein. Sd. 157—159°. HCl, (HCl, AuCl<sub>3</sub>), (HCl, 6HgCl<sub>2</sub>) (*B.* 37, 1896 *C.* 1904 [2] 238).  
 \*15)  $\beta$ -Conicein (*B.* 37, 1895 *C.* 1904 [2] 238).  
 \*27) 2,2,5,5-Tetramethyl-2,5-Dihydropyrrol. (2HCl, PtCl<sub>4</sub>) (*B.* 36, 3372 *C.* 1903 [2] 1187).

- $C_8H_{15}N$  30) *i*- $\alpha$ -Conicein. *Sd.* 156—159° (158—161°). *HCl*, (*HCl*, 6 *HgCl*<sub>2</sub>), (2 *HCl*, *PtCl*<sub>4</sub>), *Pikrat* (*B.* 37, 1897 *C.* 1904 [2] 238; *B.* 37, 1892 *C.* 1904 [2] 238).
- 31) *i*- $\epsilon$ -Conicein. *Sd.* 151—153°. *HCl*, (*HCl*, *AuCl*<sub>3</sub>), *Pikrat* (*B.* 37, 1889 *C.* 1904 [2] 238).
- $C_8H_{15}N_2$  C 62,7 — H 9,8 — N 27,4 — *M. G.* 153.
- 1) 2,5-Dipropyl-1,3,4-Triazol. *Sm.* 70°; *Sd.* 176°<sub>15</sub> *Ag* (*J. pr.* [2] 69, 493 *C.* 1904 [2] 600).
- 2) 2,5-Diisopropyl-1,3,4-Triazol. *Sm.* 140—150°. *Ag* (*J. pr.* [2] 69, 500 *C.* 1904 [2] 600).
- $C_8H_{10}O$  \*2)  $\delta$ -Oxy- $\delta$ -Methyl- $\alpha$ -Hepten (*C.* 1903 [2] 1415).
- \*5)  $\delta$ -Oxy- $\delta$ -Äthyl- $\alpha$ -Hexen (*C.* 1903 [2] 1415).
- \*14)  $\beta$ -Dimethylhexan- $\beta$ -Oxyd (*C.* 1904 [1] 578).
- \*16)  $\beta$ -Ketooktan. *Sd.* 170,5—172° (*Bl.* [3] 29, 674 *C.* 1903 [2] 487).
- \*17)  $\gamma$ -Ketooktan. *Sd.* 167—168° (*Bl.* [3] 31, 1158 *C.* 1904 [2] 1707).
- \*19)  $\epsilon$ -Keto- $\beta$ -Methylheptan. *Sd.* 163,5° (*Bl.* [3] 31, 1158 *C.* 1904 [2] 1708).
- \*29) 2-Oxy-1,3-Dimethylhexahydrobenzol (*C.* 1903 [2] 1415).
- \*33) Aldehyd d. Heptan- $\alpha$ -Carbonsäure. *Sd.* 81°<sub>32</sub> (*C. r.* 138, 699 *C.* 1904 [1] 1066).
- \*39)  $\epsilon$ -Oxy- $\epsilon$ -Methyl- $\alpha$ -Hepten. *Sd.* 65°<sub>14</sub> (*A.* 329, 176 *C.* 1903 [2] 1413).
- 40)  $\rho$ -Oxy-1-Methyl- $R$ -Heptamethylen (*C.* 1903 [2] 1415).
- 41)  $\alpha$ -Oxyäthylhexahydrobenzol. *Sd.* 87°<sub>11</sub> (189°<sub>755</sub>) (*Bl.* [3] 29, 1050 *C.* 1903 [2] 1437; *C. r.* 139, 344 *C.* 1904 [2] 704).
- 42) 1-Oxy-1-Äthylhexahydrobenzol. *Sm.* 33°; *Sd.* 166°<sub>700</sub> u. *Zers.* (*C. r.* 138, 1321 *C.* 1904 [2] 219).
- 43) Alkohol (aus  $\alpha$   $\beta$  Diamidooktan). *Sd.* 183—187° (u. 187—193°) (*M.* 24, 398 *C.* 1903 [2] 620).
- 44) Methyläther d.  $\beta$ -Oxy- $\alpha$ -Hepten. *Sd.* 144,5° (*C. r.* 138, 287 *C.* 1904 [1] 719; *Bl.* [3] 31, 522 *C.* 1904 [1] 1551).
- 45) Aldehyd d. Heptan- $\delta$ -Carbonsäure. *Sd.* 159—161° (*C. r.* 138, 91 *C.* 1904 [1] 505; *Bl.* [3] 31, 306 *C.* 1904 [1] 1133).
- $C_8H_{10}O_2$  \*3)  $\gamma$ -Oxy- $\beta\beta$ -Trimethylpentan- $\gamma$ -Oxyd (*C.* 1904 [2] 1025).
- \*8) Diisobutyraldehyd (*M.* 25, 189 *C.* 1904 [1] 1000).
- \*10) Caprylsäure. *Sm.* 16° (*Bl.* [3] 29, 663 *C.* 1903 [2] 487; *Bl.* [3] 29, 1120 *C.* 1904 [1] 259).
- 59) Monoäthyläther d. isom. 1,2-Dioxyhexahydrobenzol. *Sd.* 195°<sub>762</sub> (*C. r.* 136, 384 *C.* 1903 [1] 711).
- 60) Bisacetolmethylalkoholat. *Sm.* 130° (127°); *Sd.* 196° (193—194°) (*C.* 1902 [2] 928; *A.* 335, 257 *C.* 1904 [2] 1283).
- 61) Oxyd (aus d. Glycerin d. Methylpropylallylcarbinol). *Sd.* 217—219° (*C.* 1904 [2] 185).
- 62) Äthylester d.  $\beta$ -Methylbutan- $\beta$ -Carbonsäure. *Sd.* 141—142° (*Bl.* [3] 31, 749 *C.* 1904 [2] 303).
- $C_8H_{10}O_3$  47)  $\beta$ -Oxy- $\beta\delta$ -Dimethylpentan- $\alpha$ -Carbonsäure. *Fl.* *Ca*, *Zn*, *Ag* (*C.* 1904 [2] 185).
- 48) Äthylester d.  $\alpha$ -Oxy- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. *Sd.* 108°<sub>25</sub> (*Bl.* [3] 31, 321 *C.* 1904 [1] 1134).
- 49) Äthylester d.  $r$ - $\delta$ -Oxy- $\beta$ -Methylbutan- $\delta$ -Carbonsäure (*Ac.* d.  $r$ - $\alpha$ -Oxyisocapronsäure). *Sd.* 82°<sub>10</sub> (*Bl.* [3] 31, 1180 *C.* 1904 [2] 1710).
- $C_8H_{10}O_6$  \*3) Dimethyläther d. *i*-Inosit. *Sm.* 195,5°; *subl.* oberh. 200° (*B.* 36, 3110 *C.* 1903 [2] 1003).
- $C_8H_{10}N_2$  15) Nitril d.  $\delta$ -Äthylamido- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. *Sd.* 83,5 bis 84°<sub>12</sub> (*B.* 37, 4093 *C.* 1904 [2] 1725).
- 16) Nitril d.  $\alpha$ -Isoamylamidopropionsäure. *H*<sub>2</sub>*SO*<sub>4</sub> (*Bl.* [3] 29, 1200 *C.* 1904 [1] 354).
- 17) Nitril d. Dipropylamidoessigsäure. *Sd.* 200—202° (*C.* 1904 [2] 1378).
- $C_8H_{10}N_4$  2) 3,6-Dipropyl-1,4-Dihydro-1,2,4,5-Tetrazin. *Sm.* 179° (*J. pr.* [2] 69, 488 *C.* 1904 [2] 599).
- 3) 3,6-Diisopropyl-1,4-Dihydro-1,2,4,5-Tetrazin. *Sm.* 221° u. *Zers.* (*J. pr.* [2] 69, 498 *C.* 1904 [2] 600).
- $C_8H_{10}Br_2$  9)  $\alpha\delta$ -Dibrom- $\beta\beta$ -Trimethylpentan. *Sm.* 68°; *Sd.* 102—103°<sub>14</sub> (*M.* 24, 598 *C.* 1903 [2] 1235).
- $C_8H_{17}N$  \*9) *d*-Coniin (*B.* 37, 2429 *C.* 1904 [2] 442).
- \*12) Isoconiin (*B.* 36, 3698 *C.* 1903 [2] 1382).

- $C_8H_{17}N$  39)  $\epsilon$ -Amido- $\alpha$ -Dimethyl- $\beta$ -Hexen. *Sd.*  $150^{\circ}_{700}$ . (2HCl, PtCl<sub>4</sub>) (*B.* 36, 33; *C.* 1903 [2] 105).
- 40) Aethylamidohexahydrobenzol. *Sd.*  $164^{\circ}$  (*C. r.* 138, 1258 *C.* 1904 [2] 105).
- 41) Dimethylamidohexahydrobenzol. *Sd.*  $165^{\circ}$  (*C. r.* 138, 1258 *C.* 1904 [2] 105).
- 42) 2-Methyl-5-Isopropyltetrahydropyrrol. *Sd.*  $150$ — $151^{\circ}$ . HCl (*C.* 1903 [2] 1324).
- $C_8H_{17}Cl$  \*1)  $\alpha$ -Chloroktan. *Sd.*  $78^{\circ}_{15}$  (*Bl.* [3] 31, 673 *C.* 1904 [2] 184).
- $C_8H_{18}O$  \*1)  $\alpha$ -Oxyoktan. *Sd.*  $96^{\circ}_{17}$  (*C. r.* 136, 1677 *C.* 1903 [2] 419; *Bl.* [3] 31, 673 *C.* 1904 [2] 184).
- \*3)  $\delta$ -Oxy- $\delta$ -Methylheptan (*C.* 1903 [2] 1415).
- 31) Propyläther d.  $\alpha$ -Oxypentan (Propylamyläther). *Sd.*  $130^{\circ}$  (*C. r.* 138, 814 *C.* 1904 [1] 1195).
- $C_8H_{18}O_2$  \*3)  $\alpha\gamma$ -Dioxy- $\beta\beta\delta$ -Trimethylpentan. *Sm.*  $51^{\circ}$ ; *Sd.*  $222^{\circ}$  (*M.* 25, 195 *C.* 1904 [1] 1001; *M.* 25, 252 *C.* 1904 [1] 1330).
- \*13)  $\beta\epsilon$ -Dioxy- $\beta\epsilon$ -Dimethylhexan. *Sm.*  $88,5$ — $89^{\circ}$  (*C.* 1904 [1] 578).
- 14)  $\alpha\beta$ -Dioxyoktan. *Sm.*  $58,5^{\circ}$  ( $63^{\circ}$ ); *Sd.*  $172^{\circ}_{20}$  (*M.* 24, 404 *C.* 1903 [2] 620; *C. r.* 137, 329 *C.* 1903 [2] 711; *M.* 25, 345 *C.* 1904 [1] 1399).
- 15) isom. Dioxyoktan. *Sd.*  $151$ — $159^{\circ}_{12-15}$  (*M.* 24, 405 *C.* 1903 [2] 620).
- 16)  $\alpha\delta$ -Dioxy- $\beta\beta\delta$ -Trimethylpentan. *Sm.*  $86^{\circ}$ ; *Sd.*  $209$ — $211^{\circ}$  (*M.* 24, 600 *C.* 1903 [2] 1235).
- 17)  $\gamma\delta$ -Dioxy- $\beta\beta\delta$ -Trimethylpentan. *Sm.*  $64,5$ — $65^{\circ}$ ; *Sd.*  $201$ — $202,5^{\circ}_{745}$  (*C.* 1904 [2] 1025).
- 18)  $\alpha$ -Aethyläther d.  $\alpha\beta$ -Dioxy- $\beta$ -Aethylbutan. *Sd.*  $168^{\circ}$  (*C. r.* 138, 91 *C.* 1904 [1] 505; *Bl.* [3] 31, 303 *C.* 1904 [1] 1133).
- $C_8H_{18}N_2$  \*2) 1-Amido-2-Methyl-5-Aethylhexahydropyridin. *Sd.*  $180$ — $185^{\circ}$  (*C.* 1903 [1] 1034).
- \*5) 1,4-Diäthylhexahydro-1,4-Diazin. *Sd.*  $169$ — $171^{\circ}$ . (2HCl, PtCl<sub>4</sub>) (*B.* 36, 144 *C.* 1903 [1] 526).
- 15) 3,5-Diamido-1,1-Dimethylhexahydrobenzol. *Sd.*  $103$ — $105^{\circ}_{9-10}$ . 2HCl, 2HNO<sub>3</sub>, H<sub>3</sub>PO<sub>4</sub>, Oxalat (*A.* 328, 109 *C.* 1903 [2] 245).
- 16) 1-Amido-2,4,6-Trimethylhexahydropyridin. *Sd.*  $180$ — $185^{\circ}$  (*C.* 1903 [1] 1034).
- $C_8H_{19}N$  \*7) Diisobutylamin. (2HCl, PtCl<sub>4</sub>) (*C.* 1904 [1] 923).
- $C_8H_{20}N_2$  \*1)  $\alpha\beta$ -Diamidooktan (*M.* 24, 393 *C.* 1903 [2] 620).
- $C_8H_{20}Sn$  \*1) Zinntetraäthyl. *Sd.*  $175^{\circ}$  ( $180$ — $181^{\circ}_{758}$ ) (*C.* 1904 [1] 353; *B.* 37, 320 *C.* 1904 [1] 637).

## — 8 III —

- $C_8H_2O_3Cl_2$  4) Anhydrid d. 3,5-Dichlorbenzol-1,2-Dicarbonsäure. *Sm.*  $89^{\circ}$  (*Soc.* 81, 1536 *C.* 1903 [1] 21, 140).
- $C_8H_3O_5N$  \*1) Anhydrid d. 3-Nitrobenzol-1,2-Dicarbonsäure. *Sm.*  $164^{\circ}$  (*B.* 35, 3859 *C.* 1903 [1] 153).
- $C_8H_4O_2Cl_4$  \*4) 2,3,4,6-Tetrachlorphenylester d. Essigsäure. *Sm.*  $69^{\circ}$  (*B.* 37, 4014 *C.* 1904 [2] 1716).
- $C_8H_4O_4N_2$  \*4) Imid d. 3-Nitrobenzol-1,2-Dicarbonsäure. *Sm.*  $216^{\circ}$ . K (*B.* 35, 3867 *C.* 1903 [1] 154).
- 5) 6-Nitro-2-Cyanbenzol-1-Carbonsäure. *Sm.*  $99$ — $100^{\circ}$  (*C.* 1903 [2] 431).
- $C_8H_4O_4Cl_2$  7) 3,5-Dichlorbenzol-1,2-Dicarbonsäure. *Sm.*  $164^{\circ}$  u. Zers.  $\Delta_{G_2}$  (*Soc.* 81, 1536 *C.* 1903 [1] 21, 140).
- $C_8H_4O_4Br_2$  \*2) 4,5-Dibrombenzol-1,2-Dicarbonsäure. *Sm.*  $209^{\circ}$  (*A.* 334, 365 *C.* 1904 [2] 1055).
- $C_8H_5OCl_5$  1) Aethyläther d. Pentachloroxybenzol. *Sm.*  $89$ — $90^{\circ}$  (*B.* 37, 4019 *C.* 1904 [2] 1717).
- $C_8H_5OBr_3$  5) Phenyläther d.  $\alpha\beta\beta$ -Tribrom- $\alpha$ -Oxyäthen. *Sm.*  $94^{\circ}$  (*B.* 36, 292 *C.* 1903 [1] 581).
- $C_8H_5O_2N$  \*2) 4-Nitrophenylacetylen. *Sm.*  $149^{\circ}$  (*A.* 328, 233 *C.* 1903 [2] 999).
- \*4) Isatin (*B.* 37, 938 *C.* 1904 [1] 1216).
- \*6) 2-Cyanbenzol-1-Carbonsäure (*B.* 37, 3226 *C.* 1904 [2] 1121).
- \*7) 3-Cyanbenzol-1-Carbonsäure. *Sm.*  $217^{\circ}$  (*B.* 37, 3225 *C.* 1904 [2] 1121).
- \*8) 4-Cyanbenzol-1-Carbonsäure. *Sm.*  $214^{\circ}$ . Ag (*B.* 18, 1498; *B.* 37, 3221 *C.* 1904 [2] 1120).

- $C_6H_5O_2N$  15) Benzoylisocyansäure. Sm. 25,5—26°; Sd. 202,5—204°<sub>724</sub> (B. 36, 3218 C. 1903 [2] 1056).
- $C_6H_5O_2Br_3$  \*1) Methylester d. 2,4,6-Tribrombenzol-1-Carbonsäure. Sm. 68° (B. 37, 3659 C. 1904 [2] 1452).
- $C_6H_5O_2J_3$  2) 2,4,5-Trijodphenylester d. Essigsäure. Sm. 123° (C. r. 137, 1066 C. 1904 [1] 266).
- $C_6H_5O_3N$  \*6) Isatosäure. Sm. 252—253° u. Zers. (Bl. [3] 31, 884 C. 1904 [2] 673).
- $C_6H_5O_3Br_3$  7) 2,4,6-Tribrom-3-Oxyphenylessigsäure. Sm. 237° u. Zers. (B. 37, 2121 C. 1904 [2] 438).
- $C_6H_5O_4N_3$  8) 5-Nitro-4-Phenyl-1,2,3,6-Dioxdiazin. Sm. 110° (A. 328, 251 C. 1903 [2] 1000).
- $C_6H_5O_4Cl$  \*4) 4-Chlorbenzol-1,3-Dicarbonsäure. Sm. 294,5° (B. 36, 1799 C. 1903 [2] 283).
- $C_6H_5O_5N$  8) 2-Aldehyd d. 3-Nitrobenzol-1,2-Dicarbonsäure + H<sub>2</sub>O. Sm. 156 bis 157° (wasserfrei) (M. 24, 820 C. 1904 [1] 372).
- 9) 1-Aldehyd d. 4-Nitrobenzol-1,2-Dicarbonsäure. Sm. 159—161° (M. 24, 816 C. 1904 [1] 372).
- 10) 1,2-Methylenätherester d. 5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 110° (A. 330, 92 C. 1904 [1] 1075).
- $C_6H_5O_5N_3$  \*1) Nitrid d. 3,5-Dinitro-2-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 148° (B. 36, 4360 C. 1904 [1] 447; B. 37, 1850 C. 1904 [1] 1492).
- $C_6H_5O_6N$  \*12) Pyridin-3,4,5-Tricarbonsäure. Zers. bei 261°. Ag<sub>3</sub> (A. 326, 268 C. 1903 [1] 927).
- $C_6H_5O_6N_6$  \*1) Purpursäure. NH<sub>4</sub> + H<sub>2</sub>O (Murexid), K, Na + H<sub>2</sub>O, Na<sub>2</sub> + 3 H<sub>2</sub>O (A. 333, 29 C. 1904 [2] 768; Am. 31, 662 C. 1904 [2] 316; B. 37, 2686 C. 1904 [2] 829).
- $C_6H_5O_8N_3$  \*3) Methylester d. 2,4,6-Trinitrobenzol-1-Carbonsäure. Sm. 158° (B. 37, 3660 C. 1904 [2] 1452).
- $C_6H_6O_9N_5$  C 30,5 — H 1,6 — O 45,7 — N 22,2 — M. G. 315.
- 1) Methylnitramid d. 2,4,6-Trinitrobenzol-1-Carbonsäure. Sm. 173°. + C<sub>6</sub>H<sub>6</sub> (R. 21, 394 C. 1903 [1] 152; C. 1903 [2] 1173).
- $C_6H_6NS_2$  \*1) Phenylimid d. Dithiooxalsäure. Sm. 128—129° (C. 1903 [2] 493).
- $C_6H_6N_2J$  1) 1-Jod-2,3-Benzdiazin. Sm. 78° (B. 36, 3377 C. 1903 [2] 1192).
- $C_6H_6ON_2$  \*6) 4-Oxy-1,3-Benzdiazin. Sm. 215,5—216,5° (C. 1903 [1] 174; B. 37, 3649 C. 1904 [2] 1513).
- \*11) Diazoacetophenon. Sm. 49—50° (A. 325, 141 C. 1903 [1] 644).
- 22) Nitril d. 2-Formylamidobenzol-1-Carbonsäure (C. 1903 [1] 174).
- 23) Nitril d. 3-Formylamidobenzol-1-Carbonsäure. Sm. 150,5—151° (C. 1904 [2] 101).
- $C_6H_6OCl_4$  1) Äthyläther d. 2,3,4,6-Tetrachlor-1-Oxybenzol. Sm. 59—60° (B. 37, 4016 C. 1904 [2] 1716).
- $C_6H_6OBr_2$  \*1) Phenyläther d. ββ-Dibrom-α-Oxyäthen. Sm. 37—38°; Sd. 143°<sub>20</sub> (B. 36, 290 C. 1903 [1] 581).
- 8) Phenyläther d. αβ-Dibrom-α-Oxyäthen. Sd. 155,8°<sub>26</sub> (B. 36, 294 C. 1903 [1] 582).
- $C_6H_6OBr_4$  13) Phenyläther d. ααββ-Tetrabrom-α-Oxyäthan. Sd. 201°<sub>16</sub> (B. 36, 294 C. 1903 [1] 582).
- $C_6H_6O_2N_2$  \*12) 2,4-Diketo-1,2,3,4-Tetrahydro-1,3-Benzdiazin (J. pr. [2] 69, 33 C. 1904 [1] 641).
- 36) 3-Nitroindol. Sm. 210° (G. 34 [2] 60 C. 1904 [2] 710).
- 37) 5,6-Dioxy-2,3-Benzdiazin. HCl + H<sub>2</sub>O (B. 36, 3376 C. 1903 [2] 1191).
- 38) 5,8-Diketo-5,6,7,8-Tetrahydro-1,6[oder 1,7]-Benzdiazin (Dioxychinopyrin). Zers. bei 225°. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 37, 2134 C. 1904 [2] 233).
- 39) Nitril d. 6-Nitro-1-Methylbenzol-2-Carbonsäure. Sm. 69,5° (B. 37, 1025 C. 1904 [1] 1203).
- 40) Imid d. 3-Amidobenzol-1,2-Dicarbonsäure. Sm. 256—257° (B. 36, 2496 C. 1903 [2] 567).
- $C_6H_6O_2Cl_2$  \*7) 3,5-Dichlor-1-Methylbenzol-2-Carbonsäure. Sm. 184—185° (Soc. 85, 279 C. 1904 [1] 1010).
- $C_6H_6O_2Cl_4$  \*5) 1-Methyläther d. 2,3,5,6-Tetrachlor-4-Oxy-1-Oxymethylbenzol. Sm. 150—151° (A. 328, 296 C. 1903 [2] 1248).

- $C_8H_8O_2Br_4$  9) 2,2,4,4-Tetrabrom-1,3-Diketo-5,6-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 128—129° u. Zers. (A. 329, 307 C. 1904 [1] 793).
- $C_8H_8O_2J_2$  4) 3,4-Dijodphenylester d. Essigsäure. Fl. (Bl. [3] 29, 606 C. 1903 [2] 359).
- 5) 3,5-Dijodphenylester d. Essigsäure. Sm. 79° (C. r. 136, 238 C. 1903 [1] 574).
- $C_8H_8O_3N_2$  18) 5-Oxy-4-Phenyl-1,2,3,6-Dioxdiazin. Sm. 133° u. Zers. (A. 328, 255 C. 1903 [2] 1001).
- 19) Nitril d.  $\alpha$ -Oxy-2-Nitrophenylessigsäure. Sm. 95° (B. 37, 948 C. 1904 [1] 1217).
- 20) Nitril d. 3-Nitro-2-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 141 bis 142° (B. 36, 4360 C. 1904 [1] 447).
- 21) Nitril d. 5-Nitro-2-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 191 bis 193° (B. 36, 4360 C. 1904 [1] 447).
- $C_8H_8O_3Br_2$  10) Methylester d. 4,6-Dibrom-3-Oxybenzol-1-Carbonsäure. Sm. 144 bis 145° (G. 32 [2] 338 C. 1903 [1] 580).
- $C_8H_8O_4N_2$  \*3)  $\beta$ -Nitro- $\alpha$ -[4-Nitrophenyl]äthen. Sm. 199° (A. 325, 14 C. 1903 [1] 287).
- $C_8H_8O_4N_4$  4) 4,6-Dinitro-5-Methylindazol. Sm. 190—191° (B. 37, 2591 C. 1904 [2] 660).
- 5) 5,7-Dinitro-6-Methylindazol. Sm. 229° (B. 37, 2594 C. 1904 [2] 660).
- 6) 4,6-Dinitro-7-Methylindazol. Sm. 200° u. Zers. (B. 37, 2587 C. 1904 [2] 659).
- $C_8H_8O_5N_2$  \*8) Methyl-3,5-Dinitrophenylketon. Sm. 82—84° (J. pr. [2] 69, 468 C. 1904 [2] 596).
- \*10) 1-Amid d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 150—157° (C. 1903 [2] 431).
- 11) Nitromethyl-4-Nitrophenylketon. Sm. 148—148,5° (A. 325, 18 C. 1903 [1] 287; A. 328, 231 C. 1903 [2] 999).
- 12) 1-Amid d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 152—155° (B. 35, 3862, 3866 C. 1903 [1] 154).
- $C_8H_8O_5N_2$  16) 4,6-Dinitro-1-Methylbenzol-3-Carbonsäure. Sm. 171—171,5° (G. 33 [2] 278 C. 1904 [1] 265).
- 17) 6-Nitro-4-Amidobenzol-1,3-Dicarbonsäure. Sm. 280° u. Zers. Pb (G. 33 [2] 287 C. 1904 [1] 265).
- $C_8H_8O_5N_4$  \*2) Hydursäure.  $NH_4$  (Uramilsäure) (A. 26, 314; A. 333, 84 C. 1904 [2] 827).
- $C_8H_8O_7N_2$  5) 3,5-Dinitro-2-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 200° (B. 36, 4361 C. 1904 [1] 447).
- 6) Aldehyd d. 2,6-Dinitro-3,4-Dioxybenzol-4-Methyläther-1-Carbonsäure. Sm. 164—165° (B. 35, 4394 C. 1903 [1] 340).
- $C_8H_8O_7N_4$  5) Methylamid d. 2,4,6-Trinitrobenzol-1-Carbonsäure. Sm. 285° u. Zers. (R. 21, 383 C. 1903 [1] 152).
- $C_8H_8O_8N_4$  \*1) Alloxantin +  $2H_2O$  (B. 36, 1581 C. 1903 [1] 1398; A. 333, 57 C. 1904 [2] 771).
- \*2) Methylester d. 2,4,6-Trinitrophenylamidoameisensäure. Sm. 192° K (Soc. 85, 650 C. 1904 [2] 310).
- $C_8H_8NCl$  \*2) Nitril d. 4-Chlorphenylessigsäure. Sm. 30° (J. pr. [2] 67, 377 C. 1903 [1] 1356).
- 10) Nitril d. 6-Chlor-1-Methylbenzol-2-Carbonsäure. Sm. 19°; Sd. 107°<sub>28</sub> (B. 37, 1025 C. 1904 [1] 1203).
- $C_8H_8N_2S$  1) 5-Phenyl-1,2,3-Thiodiazol. Sm. 53—53,5° +  $HgCl_2$  (A. 333, 12 C. 1904 [2] 780).
- 2) 2-Merkapto-1,3-Benzdiazin. Sm. 229—231° (B. 36, 802 C. 1903 [1] 977).
- 3) Phenylamid d. Cyanthioessigsäure. Sm. 82° (B. 37, 3718 C. 1904 [2] 1449).
- $C_8H_8N_2S_2$  \*2) 2-Thiocarbonyl-4-Phenyl-2,4-Dihydro-1,3,4-Thiodiazol (3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol-2,5-Sulfit). Sm. 19C° (J. pr. [2] 67, 246 C. 1903 [1] 1264).
- $C_8H_8Cl_2Br_2$  5) 3,5-Dichlor-4,6-Dibrom-1,2-Dimethylbenzol. Sm. 233° (Soc. 85, 273, 285 C. 1904 [1] 806, 1009).

- $C_8H_7ON$  \*8) Indoxyl (D.R.P. 137208, 137955 *C.* 1903 [1] 110; D.R.P. 139393 *C.* 1903 [1] 745; D.R.P. 141749 *C.* 1903 [1] 1323; *B.* 36, 1624 *C.* 1903 [2] 36; D.R.P. 142700 *C.* 1903 [2] 271; D.R.P. 145601 *C.* 1903 [2] 1225).
- \*10) Phthalimidin.  $HCl$ ,  $HBr$ ,  $(HBr, Br_2)$ ,  $(HJ, J_2)$  (*B.* 36, 155 *C.* 1903 [1] 444).
- \*16) Nitril d.  $\alpha$ -Oxyphenylessigsäure.  $K + xH_2O$  (*Soc.* 85, 1208 *C.* 1904 [2] 1119).
- \*25) Nitril d. 4-Oxybenzylmethylläther-1-Carbonsäure. Sm. 59,5—60,5° (56°) (*B.* 36, 370 *C.* 1903 [1] 577; *B.* 36, 650 *C.* 1903 [1] 768).
- 26) Methylantranil. Sd. 245° (121—122°<sub>17</sub>; 110,5—111°<sub>10</sub>).  $+ 1\frac{1}{2}HgCl_2$ ,  $(2HCl, SnCl_4)$ ,  $(2HCl, PtCl_4 + 2H_2O)$  (*Ar.* 240, 434 *C.* 1902 [2] 939; *B.* 36, 1616 *C.* 1903 [2] 36; *B.* 36, 3643 *C.* 1903 [2] 1331; *B.* 36, 3649 *C.* 1903 [2] 1332; *B.* 36, 4295 *C.* 1904 [1] 507; *B.* 36, 4186 *C.* 1904 [1] 279; *B.* 37, 967 *C.* 1904 [1] 1078).
- 27) Nitril d. 6-Oxy-1-Methylbenzol-2-Carbonsäure. Sm. 195° (*B.* 37, 1027 *C.* 1904 [1] 1203).
- 28) Nitril d. 2-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 99,5° (*B.* 36, 4359 *C.* 1904 [1] 447).
- $C_8H_7ON_3$  22) 3-Cyanphenylharnstoff. Sm. 160—162° (*C.* 1904 [2] 102).
- 23) 5-Oxy-1-Phenyl-1,2,3-Triazol. Sm. 118—119°  $HCl$ ,  $Na$  (*B.* 35, 4054 *C.* 1903 [1] 170; *A.* 335, 81 *C.* 1904 [2] 1231).
- 24) 3-Amido-4-Keto-3,4-Dihydro-1,3-Benzodiazin. Sm. 204° (*J. pr.* [2] 69, 100 *C.* 1904 [1] 730).
- 25) Nitril d. Phenylnitrosamidoessigsäure. Sm. 51—52° (*B.* 37, 2638 *C.* 1904 [2] 519).
- 26) Nitril d. 4-Methylnitrosamidobenzol-1-Carbonsäure. Sm. 125° (*B.* 37, 1741 *C.* 1904 [1] 1599).
- $C_8H_7OBr$  6) Phenyläther d.  $\beta$ -Brom- $\alpha$ -Oxyäthen. Sd. 115—116°<sub>15</sub> (*B.* 36, 293 *C.* 1903 [1] 581).
- $C_8H_7OBr_3$  15) *p*-Tribromoxydimethylbenzol. Sm. 176—177,5° (*Soc.* 83, 124 *C.* 1903 [1] 231, 449).
- 16) isom. *p*-Tribromoxydimethylbenzol. Sm. 182—183° (*Soc.* 83, 128 *C.* 1903 [1] 231, 449).
- 17) Phenyläther d.  $\alpha\beta\beta$ -Tribrom- $\alpha$ -Oxyäthan. Sd. 191°<sub>15</sub> (*B.* 36, 294 *C.* 1903 [1] 582).
- $C_8H_7OJ_3$  2) Äthyläther d. 2,4,5-Triod-1-Oxybenzol. [Sm. 120° (*C. r.* 137, 1066 *C.* 1904 [1] 266).
- $C_8H_7O_2N$  \*11) 3-Oxy-2-Keto-2,3-Dihydroindol. Sm. 170° (*B.* 37, 946 *C.* 1904 [1] 1217).
- \*17) Phenylimidoessigsäure. Anilinsalz (*A.* 332, 277 *C.* 1904 [2] 701).
- 32) 5-Oxy-1-Methylbenzoxazol. Sm. 193° (*B.* 35, 4205 *C.* 1903 [1] 146).
- 33) 1-Keto-4-Methyl-1,2-Dihydrobenzoxazol. Sm. 128° (*Am.* 32, 17 *C.* 1904 [2] 696).
- $C_8H_7O_2N_3$  \*1) Phenylurazol.  $K$ ,  $Ap_2$  (*B.* 36, 3145 *C.* 1903 [2] 1071; *B.* 37, 621 *C.* 1904 [1] 956).
- \*4) 6-Nitro-2-Methylindazol.  $(2HCl, PtCl_4)$  (*B.* 37, 2578 *C.* 1904 [2] 658).
- \*5) 7-Nitro-5-Methylindazol. Sm. 192,5° (*B.* 37, 2588 *C.* 1904 [2] 659).
- \*6) 6-Nitro-2-Methylbenzimidazol. Sm. 219° (*B.* 36, 3970 *C.* 1904 [1] 177).
- 16) 4-Nitro-2-Methylindazol. Sm. 81—82° (*B.* 37, 2583 *C.* 1904 [2] 659).
- 17) 5-Nitro-2-Methylindazol. Sm. 128—129° (*B.* 37, 2584 *C.* 1904 [2] 659).
- 18) 7-Nitro-2-Methylindazol. Sm. 144—145° (*B.* 37, 2576 *C.* 1904 [2] 658).
- 19) 7-Nitro-3-Methylindazol. Sm. 180—181° (*B.* 37, 2586 *C.* 1904 [2] 659).
- 20) 5-Nitro-4-Methylindazol. Sm. 259° (*B.* 37, 2586 *C.* 1904 [2] 659).
- 21) 6-Nitro-4-Methylindazol. Sm. 177—178° (*B.* 37, 2586 *C.* 1904 [2] 659).
- 22) 4-Nitro-5-Methylindazol. Sm. 198—199° (*B.* 37, 2590 *C.* 1904 [2] 660).
- 23) 6-Nitro-5-Methylindazol. Sm. 231—232° (*B.* 37, 2593 *C.* 1904 [2] 660).
- 24) 4-Nitro-6-Methylindazol. Sm. 206—207° (*B.* 37, 2592 *C.* 1904 [2] 660).

- $C_8H_7O_2N_3$  25) 5-Nitro-6-Methylindazol. Sm. 173—174° (B. 37, 2588 C. 1904 [2] 659).  
 26) 7-Nitro-6-Methylindazol. Sm. 162° (B. 37, 2591 C. 1904 [2] 860).  
 27) 4-Nitro-7-Methylindazol? Sm. 222,5° (B. 37, 2587 C. 1904 [2] 659).  
 28) 6-Nitro-7-Methylindazol? Sm. 175—176° (B. 37, 2587 C. 1904 [2] 659).  
 29) 9-Nitro-5-Methylbenzimidazol. Sm. 241° (B. 36, 3971 C. 1904 [1] 178).  
 30) 5-Amido-4-Phenyl-1,2,3,6-Dioxiazin. Sm. 135—136° (A. 328, 252 C. 1903 [2] 1001).
- $C_8H_7O_2Cl$  \*14) 6-Chlor-1-Methylbenzol-2-Carbonsäure. Sm. 159° (B. 37, 1026 C. 1904 [1] 1203).  
 \*27) Chlorid d. 2-Oxybenzylmethyläther-1-Carbonsäure. Sd. 145°<sub>17</sub> (B. 36, 2585 C. 1903 [2] 621).  
 \*31) Aldehyd d. 4-Oxy-1-Chlormethylbenzol-3-Carbonsäure. Fl. (B. 37, 192 C. 1904 [1] 660).  
 \*33) Chlormethylester d. Benzolcarbonsäure. Sd. 116°<sub>10</sub> (C. 1903 [2] 656).  
 35) Aldehyd d. 3-Chlor-4-Oxybenzylmethyläther-1-Carbonsäure. Sm. 53° (B. 31, 1151). — \*III, 60.
- $C_8H_7O_2Cl_3$  \*1) Dimethyläther d. 4,5,6-Trichlor-1,2-Dioxybenzol. Sm. 68—69° (C. r. 135, 969 C. 1903 [1] 145).
- $C_8H_7O_2Br$  \*7) 4-Brom-1-Methylbenzol-2-Carbonsäure. Sm. 174—176° (C. 1904 [2] 200).
- $C_8H_7O_2Br_3$  \*2) Dimethyläther d. 4,5,6-Tribrom-1,2-Dioxybenzol. Sm. 84—86° (C. 1903 [1] 1339; C. r. 135, 968 C. 1903 [1] 144).
- $C_8H_7O_2J$  \*8) Methylester d. 3-Jodbenzol-1-Carbonsäure. Sm. 50°; Sd. 276—277°<sub>789</sub> (A. 332, 72 C. 1904 [2] 42).
- $C_8H_7O_2N$  \*1)  $\alpha$ -Nitromethylphenylketon. Sm. 105—105,5° (106°) (B. 29, 360; A. 325, 11 C. 1903 [1] 287; B. 36, 2561 C. 1903 [2] 494; A. 328, 239 C. 1903 [2] 999).  
 \*7) 3,4-Methylenäther d. anti-3,4-Dioxybenzaloxim (G. 33 [2] 307 C. 1904 [1] 288).  
 \*10) Phenylloxaminsäure. Sm. 150° (A. 335, 89 C. 1904 [2] 1231).  
 \*40) Methylester d. 2-Nitrosobenzol-1-Carbonsäure. Sm. 153° (156,5 bis 157,5°) (B. 36, 2312 C. 1903 [2] 430; B. 36, 3651 C. 1903 [2] 1332).  
 41) Methylester d. 3-Nitrosobenzol-1-Carbonsäure. Sm. 93° (B. 36, 2313 C. 1903 [2] 430).  
 42) Methylester d. 4-Nitrosobenzol-1-Carbonsäure. Sm. 128—129,5° (B. 36, 2313 C. 1903 [2] 430).  
 43) Monamid d. Benzol-1,4-Dicarbonsäure. Sm. noch nicht bei 300°.  
 Ag (B. 37, 3223 C. 1904 [2] 1121).
- $C_8H_7O_2N_3$  4) 7-Methyläther d. 3-Oximido-6,7-Dioxy-1,2-Benzisodiazol. Sm. 169° u. Zers. (C. 1903 [2] 31, 32).  
 5) Aldehyd d. 5,6-Dioxydiazobenzolimid-6-Methyläther-2-Carbonsäure (C. 1903 [2] 31).
- $C_8H_7O_2Br$  16) Methylester d. 6-Brom-3-Oxybenzol-1-Carbonsäure. Sm. 126° (G. 32 [2] 335 C. 1903 [1] 579).
- $C_8H_7O_4N$  \*22) 3-Amidobenzol-1,2-Dicarbonsäure.  $(NH_4)_2$ ,  $Ag_2$  (B. 36, 2495 C. 1903 [2] 567).  
 \*24) 4-Amidobenzol-1,3-Dicarbonsäure. Sm. 328—329° (B. 36, 1804 C. 1903 [2] 283).  
 \*28) 1,3-Methylbetain d. Pyridin-3,4-Dicarbonsäure (Apophyllensäure) (M. 24, 520 C. 1903 [2] 888; M. 24, 695 C. 1903 [2] 1282; M. 24, 710 C. 1904 [1] 218).  
 \*30) 2-Methylpyridin-4,6-Dicarbonsäure. Sm. 274°.  $(NH_4)_2$ ,  $Na_2$  +  $6H_2O$ ,  $Cu$  +  $4H_2O$  (R. 23, 136 C. 1904 [2] 193).  
 \*35) Aldehyd d. 5-Nitro-6-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 152° (B. 37, 3927 C. 1904 [2] 1595).  
 \*54) 3,4-Methylenäther d. 3,4-Dioxybenzhydroxamsäure (G. 33 [2] 241 C. 1904 [1] 24; G. 33 [2] 306 C. 1904 [1] 288).  
 \*57) 1,3-Methylbetain d. Pyridin-2,3-Dicarbonsäure +  $H_2O$ . Sm. 151° (M. 24, 202 C. 1903 [2] 48; M. 24, 710 C. 1904 [1] 218).  
 59) 1,2-Methylenäther d. 5-Nitro-2-Oxy-1-Oxymethylbenzol. Sm. 148° (A. 330, 91 C. 1904 [1] 1075).  
 60) 3-Methyläther d. 1-Keto-3,5-Dioxy-1,2-Dihydrobenzoxazol. Sm. 242° u. Zers. (M. 23, 954 C. 1903 [1] 286).

- $C_8H_7O_4N$  61) Aldehyd d. 5-Nitro-2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 134° (B. 37, 3916 C. 1904 [2] 1594).
- $C_8H_7O_4N_2$  11)  $\beta$ -[2-Nitrophenyl]hydrazonessigsäure. Sm. 202° (B. 36, 1378 C. 1903 [1] 1344).
- 12) Nitril d. 5-Nitro-3-Hydroxylamido-2-Oxy-1-Methylbenzol-1-Carbonsäure (o-Kresolpurpursäure). Zers. bei 180°. K (B. 35, 571 C. 1902 [1] 583; B. 37, 1850 C. 1904 [1] 1493).
- $C_8H_7O_4Br$  5) Brommethyl-2,3,4-Trioxyphenylketon. Sm. 158–159° (D.R.P. 71 312). — \*III, 109.
- $C_8H_7O_5N$  \*29) 5-Nitro-2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 199° (A. 330, 97 C. 1904 [1] 1076).
- \*32) Aldehyd d. 5-Nitro-3,4-Dioxybenzol-3-Methyläther-1-Carbonsäure. Sm. 175–176°. K (B. 36, 2933 C. 1903 [2] 888).
- 34) 1,2-Methylenäther d. 5-Nitro-2,4-Dioxy-1-Oxymethylbenzol. Sm. 130° (A. 330, 106 C. 1904 [1] 1076).
- 35) 6-Nitro-3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 219° (A. 330, 100 C. 1904 [1] 1076).
- 36) Aldehyd d. 2-Nitro-3,4-Dioxybenzol-4-Methyläther-1-Carbonsäure. Sm. 148–149° (B. 35, 4396 C. 1903 [1] 340).
- 37) Aldehyd d. 5-Nitro-3,4-Dioxybenzol-4-Methyläther-1-Carbonsäure. Sm. 113° (B. 35, 4398 C. 1903 [1] 341).
- 38) Aldehyd d. 6-Nitro-3,4-Dioxybenzol-4-Methyläther-1-Carbonsäure. Sm. 189° (B. 35, 4395 C. 1903 [1] 340).
- 39) Methyl-2-Nitrophenylester d. Kohlensäure. Fl. (Am. 32, 15 C. 1904 [2] 695).
- 40) Methyl-4-Nitrophenylester d. Kohlensäure. Sm. 111–112° (Am. 32, 14 C. 1904 [2] 695).
- $C_8H_7O_5N_2$  13)  $\alpha$ -Oximido- $\alpha$ -[3,5-Dinitrophenyl]äthan. Sm. 122° (J. pr. [2] 69, 469 C. 1904 [2] 596).
- 14)  $\alpha$ -Oximido- $\beta$ -Nitro- $\alpha$ -[4-Nitrophenyl]äthan. Sm. 141° u. Zers. (A. 328, 230 C. 1903 [2] 999).
- 15) 3-Nitro-4-Amidophenyloxaminsäure. Sm. 215° (B. 36, 416 C. 1903 [1] 631).
- 16) Hydroxylamid d. 2-Nitrophenyloxaminsäure. Sm. 153° u. Zers.  $NH_4$ , Na, K (Soc. 81, 1568 C. 1903 [1] 157).
- 17) Hydroxylamid d. 3-Nitrophenyloxaminsäure. Sm. 161° u. Zers.  $NH_4$ , Na, K (Soc. 81, 1568 C. 1903 [1] 157).
- 18) Hydroxylamid d. 4-Nitrophenyloxaminsäure. Sm. 182° (Soc. 81, 1570 C. 1903 [1] 158).
- $C_8H_7O_5Br$  2) 5-Brom-2,4,6-Trioxy-1-Methylbenzol-2-Carbonsäure +  $H_2O$ . Sm. 149° (159–161° wasserfrei) (M. 25, 315 C. 1904 [1] 1494).
- $C_8H_7O_5N$  6) Methyl ester d. p-Nitro-2,4-Dioxybenzol-1-Carbonsäure. Sm. 167° (M. 25, 33 C. 1904 [1] 723).
- $C_8H_7O_5N_2$  \*2) 2,4,6-Trinitro-1,3-Dimethylbenzol. Sm. 176° (G. 33 [2] 278 C. 1904 [1] 265).
- 13) 2,4-Dinitrophenylamidoessigsäure. Sm. 112° (G. 34 [2] 222 C. 1904 [2] 1393).
- $C_8H_7O_5Br$  1) Gem. Anhydrid d. Essigsäure u.  $\beta$ -Brom- $\alpha$ -Keto- $\gamma$ -Oxybutan- $\alpha,\gamma$ -Dicarbonsäure- $\alpha\gamma$ -Lakton. Sm. 86° (R. 23, 150 C. 1904 [2] 193).
- $C_8H_7O_7N_2$  \*4) 2,4,6-Trinitro-5-Oxy-1,3-Dimethylbenzol. Sm. 108° (B. 37, 3477 C. 1904 [2] 1213).
- 6) Methyläther d. 2,4,6-Trinitro-3-Oxy-1-Methylbenzol. Sm. 92° (R. 21, 332 C. 1903 [1] 78).
- $C_8H_7O_5N_2$  \*1) Dimethyläther d. 3,4,5[oder 3,4,6]-Trinitro-1,2-Dioxybenzol. Sm. 147° (R. 23, 114 C. 1904 [2] 205).
- \*2) Dimethyläther d. 2,4,6-Trinitro-1,3-Dioxybenzol. Sm. 125° (R. 21, 324 C. 1903 [1] 79).
- $C_8H_7O_5N_2$  \*2) 2,4,6-Trinitro-3-Methylnitramido-1-Methylbenzol. Sm. 101° (R. 21, 333 C. 1903 [1] 78).
- \*3) 2,3,5-Trinitro-4-Methylnitramido-1-Methylbenzol. Sm. 156,5° (J. pr. [2] 67, 520 C. 1903 [2] 238).
- $C_8H_7O_5N_2$  2) Methyläther d. 2,4,6-Trinitro-3-Methylnitramidobenzol. Sm. 98° (R. 8, 276; R. 23, 121 C. 1904 [2] 206).

- $C_8H_7N_2Cl$  4) 4-Chlor-2-Methylbenzimidazol. Sm. 199° (B. 36, 4028 C. 1904 [1] 294).  
 5) Nitril d. 2-Chlorphenylamidoessigsäure. Sd. 174—175°<sub>14</sub> (B. 37, 4082 C. 1904 [2] 1723).
- $C_8H_7N_2S_2$  3) 3-Merkapto-5-Thiocarbonyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 181° (B. 37, 185 C. 1904 [1] 670).
- $C_8H_7Cl_2Br$  3) 3,5-Dichlor-4-Brom-1,2-Dimethylbenzol. Sm. 100°; Sd. 265—270° (Soc. 85, 273 C. 1904 [1] 806, 1008).  
 4) 3,5-Dichlor-6-Brom-1,2-Dimethylbenzol. Sm. 42° (Soc. 85, 280 C. 1904 [1] 1009).
- $C_8H_7Cl_3J_2$  1)  $\alpha\beta$ -Dichloräthyl-3-Jodphenyljodoniumchlorid. Sm. 148° (B. 37, 1309 C. 1904 [1] 1340).
- $C_8H_7BrMg$  1) Magnesiumbromidverbindung d. Phenyläthen (C. r. 135, 1347 C. 1903 [1] 328).
- $C_8H_8ON_2$  17) 4-Methyl-1,3-Phenylharnstoff. Sm. oberh. 300° (D.R.P. 146914 C. 1903 [2] 1486).
- $C_8H_8OCl_2$  7) 2-Keto-1-Dichlormethyl-1-Methyl-1,2-Dihydrobenzol. Sm. 30—33° (B. 35, 4214 C. 1903 [1] 161).  
 8) 4-Keto-1-Dichlormethyl-1-Methyl-1,4-Dihydrobenzol. Sm. 55° (B. 35, 4211 C. 1903 [1] 161).
- $C_8H_8OBr_2$  10)  $\beta$ -Dibromoxydimethylbenzol. Sm. 96,5° (Soc. 83, 127 C. 1903 [1] 231, 449).  
 11)  $\beta$ -Bromäthyläther d. 2-Brom-1-Oxybenzol. Sd. 160—162°<sub>18</sub> (B. 36, 2874 C. 1903 [2] 834).
- $C_8H_8OBr_4$  2) 3,3,5,6-Tetrabrom-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 118° (Soc. 83, 125 C. 1903 [1] 231, 449).
- $C_8H_8OJ_2$  3) Äthyläther d. 3,4-Dijod-1-Oxybenzol. Fl. (B. [3] 29, 606 C. 1903 [2] 359).  
 4) Äthyläther d. 3,5-Dijod-1-Oxybenzol. Sm. 29—30° (C. r. 136, 237 C. 1903 [1] 574).
- $C_8H_8OS$  6) 1-Methylbenzol-2-Thiolcarbonsäure. Fl. (B. 36, 1012 C. 1903 [1] 1078).  
 7) 1-Methylbenzol-4-Thiolcarbonsäure. Sm. 43—44° (B. 36, 1011 C. 1903 [1] 1078).
- $C_8H_8O_2N_2$  \*8) Benzoylharnstoff. Sm. 201° (B. 36, 3220 C. 1903 [2] 1056; J. pr. [2] 70, 241 C. 1904 [2] 1462).  
 \*17) Amid d. Phenylloxaminsäure (B. 37, 3715 C. 1904 [2] 1449).  
 \*19) Diamid d. Benzol-1,2-Dicarbonsäure. Sm. 228—229° (B. 37, 584 C. 1904 [1] 940).  
 \*23) Phenylnitrosamid d. Essigsäure (A. 325, 238 C. 1903 [1] 631).  
 \*26) Verbindung (aus Acetessigsäureäthylester). Sm. 245° (P. GUTMANN, Dissert., Heidelberg 1903).  
 29) 2-Nitro-3-Imidomethyl-1-Methylbenzol. Sm. 140° (C. 1900 [2] 751).  
 — \*III, 40.  
 30) 4-Nitro-3-Imidomethyl-1-Methylbenzol. Sm. 93° (C. 1900 [2] 751).  
 — \*III, 40.  
 31) Ricinin. Sm. 201,5° (C. r. 138, 506 C. 1904 [1] 896).
- $C_8H_8O_2S$  6) o-Xylylsulfon. Sm. 150—152° (B. 36, 188 C. 1903 [1] 467).  
 7)  $\alpha$ -Merkaptophenylessigsäure. Fl. (C. 1903 [2] 1272).
- $C_8H_8O_2N_2$  \*14)  $\alpha$ -Styrolnitrosit (Styrolpseudonitrosit). Sm. 129° u. Zers. (158°?) (B. 36, 2559 C. 1903 [2] 494).  
 \*15)  $\alpha$ -Oximido- $\beta$ -Nitro- $\alpha$ -Phenyläthan ( $\beta$ -Styrolnitrosit). Sm. 96° (B. 36, 2560 C. 1903 [2] 494).  
 \*56) 3-Nitro-4-Methylphenylamid d. Ameisensäure. Sm. 133—134° (D.R.P. 138839 C. 1903 [1] 427).  
 57)  $\alpha$ -Nitroso- $\alpha$ -Nitro- $\alpha$ -Phenyläthan. Fl. (B. 36, 707 C. 1903 [1] 818).  
 58) Methyl-5-Nitro-3-Amidophenylketon. Sm. 156—158° (J. pr. [2] 69, 471 C. 1904 [2] 596).  
 59) 2-Nitro-3-Methylbenzaldoxim. Sm. 104—105° (C. 1900 [2] 751).  
 — \*III, 40.  
 60) 6-Nitro-3-Methylbenzaldoxim. Sm. 134—135° (C. 1900 [2] 751).  
 — \*III, 40.  
 61) 1-Amidooximidomethylbenzol-4-Carbonsäure. Sm. noch nicht bei 320° (B. 37, 3222 C. 1904 [2] 1121).

- $C_8H_5O_3N_2$  62) Methylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 174° (*R.* 21, 417 *C.* 1903 [1] 506).  
 63) Methylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 218° (*R.* 21, 417).  
 64) 4-Amidophenylmonamid d. Oxalsäure (4-Amidophenylloxaminsäure). Sm. noch nicht bei 280°. Ba (*B.* 36, 413 *C.* 1903 [1] 630).  
 65) 5-Nitro-2-Methylphenylamid d. Ameisensäure. Sm. 178—179° (*D.R.P.* 138839 *C.* 1903 [1] 427).
- $C_8H_5O_4N_2$  \*1) 3,5-Dinitro-1,2-Dimethylbenzol. Sm. 69,5° (*C.* 1903 [2] 194).  
 \*2) 2,4-Dinitro-1,3-Dimethylbenzol. Sm. 82° (*G.* 33 [2] 278 *C.* 1904 [1] 264).  
 \*4) 4,6-Dinitro-1,3-Dimethylbenzol. Sm. 93° (*G.* 33 [2] 278 *C.* 1904 [1] 264).  
 \*26) 3-Nitro-4-Methylamidobenzol-1-Carbonsäure. Sm. 288° (*B.* 37, 1029 *C.* 1904 [1] 1207).  
 59) 4-Nitro-2-Nitromethyl-1-Methylbenzol. Sm. 58—59° (*C.* 1904 [2] 199).  
 60) 2-Nitro-4-Nitromethyl-1-Methylbenzol. Sm. 72° (*C.* 1904 [2] 199).  
 61) 3,6-Dimethyl-1,2-Diazin-4,5-Dicarbonsäure +  $H_2O$ . Sm. 225—226° u. Zers.  $K_2 + 3H_2O$ , Ba +  $3H_2O$ , Pb +  $3H_2O$ ,  $Ag_2$  (*B.* 36, 509 *C.* 1903 [1] 654).
- $C_8H_5O_4N_4$  3) 2-Nitrophenylamidoformylharnstoff (2-Nitrophenylbiuret). Sm. 181° (*Soc.* 81, 1568 *C.* 1903 [1] 157).  
 4) 3-Nitrophenylamidoformylharnstoff. Sm. 178° (*Soc.* 81, 1569 *C.* 1903 [1] 157).  
 5) 4-Nitrophenylamidoformylharnstoff. Sm. 206° (*Soc.* 81, 1570 *C.* 1903 [1] 158).  
 6) 2,6-Diketo-3,7-Dimethylpurin-8-Carbonsäure. Sm. 345°. K (*D.R.P.* 153121 *C.* 1904 [2] 626).  
 7) Methylester d. 2,6-Diketo-3-Methylpurin-8-Carbonsäure. Sm. 290—291° (*D.R.P.* 153121 *C.* 1904 [2] 625).
- $C_8H_5O_5N_2$  \*13)  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha$ -[2-Nitrophenyl]äthan (*Bl.* [3] 29, 527 *C.* 1903 [2] 244).
- $C_8H_5O_5S$  \*8) 1-Methylester d. Benzol-1-Carbonsäure-2-Sulfonsäure. Na +  $2H_2O$ , Ba +  $H_2O$ , Ag (*Ann.* 30, 270 *C.* 1903 [2] 1119).  
 \*10) 1-Methylester d. Benzol-1-Carbonsäure-3-Sulfonsäure. Sm. 65—67° (*M.* 23, 1112 *C.* 1903 [1] 396).  
 \*11) 3-Methylester d. Benzol-1-Carbonsäure-3-Sulfonsäure. Sm. 139 bis 140° (*M.* 23, 1114 *C.* 1903 [1] 396).  
 12) 1-Methylester d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. 99 bis 100°. Ag (*M.* 23, 1130 *C.* 1903 [1] 396).  
 13) 4-Methylester d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. 195 bis 196° (*M.* 23, 1129 *C.* 1903 [1] 396).
- $C_8H_5O_6N_2$  12) Dimethyläther d. 3,5-Dinitro-1,2-Dioxybenzol. Sm. 101° (*R.* 23, 112 *C.* 1904 [2] 205).
- $C_8H_5O_6N_4$  \*5) 2,3,5-Trinitro-4-Methylamido-1-Methylbenzol. Sm. 129° (*J. pr.* [2] 67, 534 *C.* 1903 [2] 239).  
 \*7) 3,5-Dinitro-4-Methylnitramido-1-Methylbenzol. Sm. 137° (*J. pr.* [2] 67, 543 *C.* 1903 [2] 240).  
 \*8) 2,4,6-Trinitro-5-Amido-1,3-Dimethylbenzol. Sm. 206° (*R.* 21, 330 *C.* 1903 [1] 78).  
 11) 2,4,6-Trinitro-3-Methylamido-1-Methylbenzol. Sm. 138° (*R.* 21, 332 *C.* 1903 [1] 78).  
 12) 2,5-Dinitro-4-Methylnitramido-1-Methylbenzol. Sm. 122° (*J. pr.* [2] 67, 544 *C.* 1903 [2] 240).
- $C_8H_5O_7N_4$  \*1) Methyläther d. 3,5-Dinitro-2-Methylnitramido-1-Oxybenzol. Sm. 118° (*R.* 23, 113 *C.* 1904 [2] 205).
- $C_8H_5O_8N_2$  \*4)  $\beta\gamma$ -Dimidobutan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure (Dicyandimalonsäure) (*A.* 332, 126 *C.* 1904 [2] 189).
- $C_8H_5N_2S_2$  4) 2,2'-Dimethylbenzobithiazol (Diäthenyl-2,5-Disulfhydro-p-Diamidobenzol). Sm. 98—100° (*Soc.* 83, 1206 *C.* 1903 [2] 1328).  
 5) Amid d. Phenyldithiooxaminsäure. Sm. 98° (*B.* 37, 3717 *C.* 1904 [2] 1449).
- $C_8H_5N_6Cl$  2) 3-Chlor-4,6-Dimethyl-2,1,5-Benzotriazol. Sm. 265—266° (*B.* 36, 522 *C.* 1903 [1] 649).

- $C_8H_9ON$  \*10) Benzimidomethyläther. *Sd.* 95—97°<sub>14-15</sub>. Methylsulfat (*A.* 333, 292 *C.* 1904 [2] 905).
- \*11)  $\alpha$ -Oximido- $\alpha$ -Phenyläthan (*B.* 36, 705 *C.* 1903 [1] 818).
- \*12)  $\beta$ -Oximido- $\alpha$ -Phenyläthan. *Sm.* 103° (*B.* 37, 843 *C.* 1904 [1] 1144).
- \*13) anti-2-Methylbenzaloxim. *Sm.* 49° (*B.* 36, 325 *C.* 1903 [1] 575).
- \*14) anti-4-Methylbenzaloxim. *Sm.* 79° (*B.* 36, 324 *C.* 1903 [1] 575).
- \*26) Amid d. 1-Methylbenzol-2-Carbonsäure. *Sm.* 147° (*B.* 37, 3224 *C.* 1904 [2] 1121).
- \*27) Amid d. 1-Methylbenzol-4-Carbonsäure. *Sm.* 165° (*B.* 37, 3224 *C.* 1904 [2] 1121).
- \*28) Amid d. Phenylessigsäure. *Sm.* 155° (*J. pr.* [2] 69, 29 *C.* 1904 [1] 641).
- \*34) Methylamid d. Benzolcarbonsäure. *Sm.* 75°; *Sd.* 167°<sub>11</sub> (*B.* 37, 2815 *C.* 1904 [2] 648).
- \*36) Methylphenylamid d. Ameisensäure. *Sd.* 124,9—125,2° (*B.* 36, 2476 *C.* 1903 [2] 559).
- \*47) Amid d. 1-Methylbenzol-3-Carbonsäure. *Sm.* 97° (*B.* 37, 3224 *C.* 1904 [2] 1121).
- 51)  $\gamma$ -Oxy- $\beta$ -(2-Pyridyl)propen. *Fl.* HCl, (HCl, 6HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 37, 742 *C.* 1904 [1] 1089).
- 52) Aldehyd d. 2-Methylamidobenzol-1-Carbonsäure. *Sd.* 112°<sub>10</sub> (*B.* 37, 981, 988 *C.* 1904 [1] 1079).
- $C_8H_9ON_3$  \*9)  $\alpha$ -Oximido- $\alpha$ -Phenylazoäthan. *Sm.* 118,5—119,5° (*B.* 36, 56 *C.* 1903 [1] 450; *B.* 36, 87 *C.* 1903 [1] 452).
- 11) Benzoylguanidin. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (*Ar.* 241, 476 *C.* 1903 [2] 989).
- 12) 3-Keto-4,6-Dimethyl-2,3-Dihydro-1,2,5-Benzotriazol. *Sm.* noch nicht bei 360°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*B.* 36, 519 *C.* 1903 [1] 649).
- $C_8H_9OBr$  10) 5-Brom-4-Oxy-1,3-Dimethylbenzol. *Sm.* 4—5°; *Sd.* 228—230° (*B.* 36, 2876 *Anm.* *C.* 1903 [2] 834).
- 11) *p*-Bromoxydimethylbenzol. *Sm.* 83,5—84° (*Soc.* 83, 128 *C.* 1903 [1] 231, 449).
- $C_8H_9OBr_3$  1) 3,5,6-Tribrom-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. *Sm.* 106° (*Soc.* 83, 124 *C.* 1903 [1] 231, 449).
- $C_8H_9OJ$  6) 4-Jodoso-1-Aethylbenzol. *Sm.* 89° (*A.* 327, 288 *C.* 1903 [2] 351).
- $C_8H_9O_2N$  \*1)  $\alpha$ -Nitroäthylbenzol. *Sd.* 115—115,5°<sub>11</sub> (*B.* 35, 3885 *C.* 1903 [1] 27; *B.* 36, 706 *C.* 1903 [1] 818).
- \*15) 2-Acetylamido-1-Oxybenzol. *Sm.* 209° (205°) (*B.* 36, 2050 *C.* 1903 [2] 383; *Soc.* 83, 755 *C.* 1903 [1] 1419; *C.* 1903 [2] 447).
- \*17) 4-Acetylamido-1-Oxybenzol (*D.R.P.* 146265 *C.* 1903 [2] 1227).
- \*26) 2-Methyläther d. 2-Oxybenzaloxim. *Sm.* 92° (*B.* 36, 649 *C.* 1903 [1] 768).
- \*27) 4-Methyläther d. anti-4-Oxybenzaloxim. *Sm.* 61° (*B.* 36, 648 *C.* 1903 [1] 768; *A.* 332, 320 *C.* 1904 [2] 651).
- \*39) Phenylamidoessigsäure (*D.R.P.* 145376 *C.* 1903 [2] 1098).
- \*44) 2-Methylamidobenzol-1-Carbonsäure. *Sm.* 182° (179°) (*B.* 36, 1806 *C.* 1903 [2] 284; *D.R.P.* 145604 *C.* 1903 [2] 1099; *M.* 24, 718 *C.* 1904 [1] 218; *B.* 37, 405 *C.* 1904 [1] 942; *B.* 37, 3981 *C.* 1904 [2] 1728).
- \*61) Aethylbetain d. Pyridin-2-Carbonsäure (*M.* 24, 709 *C.* 1904 [1] 218).
- \*64) Methylester d. 2-Amidobenzol-1-Carbonsäure. *Sd.* 126,2—126,8°<sub>12</sub> (*B.* 36, 2476 *C.* 1903 [2] 559).
- \*65) Methylester d. 3-Amidobenzol-1-Carbonsäure. *Sm.* 36—38° (*A.* 332, 196 *Anm.* *C.* 1904 [2] 210).
- \*76) Amid d. 4-Oxybenzoldimethyläther-1-Carbonsäure. *Sm.* 166,5—167,5° (*B.* 36, 371 *C.* 1903 [1] 577).
- \*77) Phenylamid d. Oxyessigsäure. *Sm.* 92° (*A.* 335, 91 *C.* 1904 [2] 1231).
- \*80) 1-Methyl-4-Nitromethylbenzol (*C.* 1904 [2] 199).
- 102) Aethyläther d. 4-Nitroso-1-Oxybenzol. *Sm.* 33—34° (*B.* 37, 46 *C.* 1904 [1] 654).
- 103) 2-[ $\alpha$ -Oxyäthyliden]amido-1-Oxybenzol. *Sm.* 190° u. Zers. (*Soc.* 83, 755 *C.* 1903 [1] 1419 *C.* 1903 [2] 447).

- $C_8H_9O_2N$  104) Methyl-2-Hydroxylamidophenylketon<sup>9</sup> Sd. 127—128°<sub>18</sub> (B. 32, 3232). — \*III, 98.
- 105) 4-Methyläther d. isom. anti-4-Oxybenzaloxim. Sm. 45° (B. 37, 3042 C. 1904 [2] 1214).
- 106) 1-Amidomethylbenzol-2-Carbonsäure. Sm. 217—220° (M. 24, 953 C. 1904 [1] 916).
- 107) 4-Methylamidobenzol-1-Carbonsäure. Sm. 228—229° (B. 37, 3979 C. 1904 [2] 1728).
- 108) Methylphenylmethylenitronsäure. Sm. 45°. Na (B. 36, 706 C. 1903 [1] 818).
- 109) polym. Säure (aus Hydrazin u. Diacetopropionsäureäthylester). =  $(C_8H_9O_2N)_x$  (B. 37, 2189 C. 1904 [2] 240).
- $C_8H_9O_2N_3$  \*2) Benzoylamidoharnstoff. Sm. 223° (A. 335, 85 C. 1904 [2] 1231).
- \*10) Amid d. Phenylnitrosamidoessigsäure. Sm. 143° (B. 37, 2639 C. 1904 [2] 519).
- \*13) Amid-Phenylhydrazid d. Oxalsäure. Sm. 231° (See. 81, 1566 C. 1903 [1] 157).
- 23) Phenylguanidin-2-Carbonsäure (o-Guanidinbenzoesäure). Sm. 260° (Am. 29, 491 C. 1903 [1] 1310).
- $C_8H_9O_2N_5$  7) Verbindung (aus Bisdiazoacetessigsäureäthylester). Zers. oberh. 250°.  $NH_4$  (G. 34 [1] 187 C. 1904 [1] 1332).
- $C_8H_9O_2J$  3) Dimethyläther d. 2-Jod-1,4-Dioxybenzol. Sd. 285°<sub>725</sub> (A. 332, 69 C. 1904 [2] 42).
- 4) 4-Jodoso-1-Aethylbenzol. Sm. 196,5° (A. 327, 289 C. 1903 [2] 351).
- $C_8H_9O_3N$  \*13) Aethyläther d. 2-Nitro-1-Oxybenzol. Sd. 267° (J. pr. [2] 67, 161 C. 1903 [1] 871).
- \*15) Aethyläther d. 4-Nitro-1-Oxybenzol. Sm. 58° (C. 1903 [2] 1051; R. 23, 37 C. 1904 [1] 1137).
- \*33) 4-Methoxybenzhydroxamsäure (G. 33 [2] 241 C. 1904 [1] 24).
- \*52) Methylester d. 4-Amido-3-Oxybenzol-1-Carbonsäure. Benzylsulfonat (D.R.P. 147580 C. 1904 [1] 130).
- \*54) Methylester d. 3-Amido-4-Oxybenzol-1-Carbonsäure. HCl, (2 HCl,  $ZnCl_2$ ), (2 HCl,  $PtCl_4$ ), (HCl,  $HgCl_2 + H_2O$ ), HBr,  $HNO_3$ ,  $H_2SO_4$ , Benzylsulfonat (A. 325, 315 C. 1903 [1] 769; D.R.P. 147580 C. 1904 [1] 130).
- 72)  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Na (A. 325, 7 C. 1903 [1] 286).
- 73) 1-Aethyläther d. 4-Nitroso-1,3-Dioxybenzol (J. pr. [2] 70, 316 C. 1904 [2] 1540).
- 74) Amidomethyl-3,4-Dioxyphenylketon. Zers. bei 300°. HCl (D.R.P. 155632 C. 1904 [2] 1487; B. 37, 4154 C. 1904 [2] 1744).
- 75) Dimethyläther d. 2-Oximido-5-Oxy-1-Keto-1,2-Dihydrobenzol. Sm. 115—117° (J. pr. [2] 70, 340 C. 1904 [2] 1542).
- 76) 5-Aethyläther d. 2-Oximido-5-Oxy-1-Keto-1,2-Dihydrobenzol. Sm. 133,5° (147—148°) (M. 19, 539; J. pr. [2] 70, 317 C. 1904 [2] 1540). — \*II, 567.
- 77) 3-Methylamido-4-Oxybenzol-1-Carbonsäure. Sm. 190° (A. 325, 328 C. 1903 [1] 770).
- 78) Aldehyd d. 2-Amido-3,4-Dioxybenzol-3-Methyläther-1-Carbonsäure. Sm. 128—129° (C. 1903 [2] 31).
- 79) Methyl-2-Amidophenylester d. Kohlensäure. HCl (Am. 31, 482 C. 1904 [2] 94; Am. 32, 15 C. 1904 [2] 695).
- 80) Methyl-4-Amidophenylester d. Kohlensäure. HCl (Am. 31, 470 C. 1904 [2] 94; Am. 32, 14 C. 1904 [2] 695).
- 81) Verbindung (aus Damascenin).  $HCl + H_2O$ , HJ (Ar. 242, 296 C. 1904 [2] 131).
- $C_8H_9O_5N_3$  \*9) 2-Nitro-4-Acetylamido-1-Amidobenzol. Sm. 188° (B. 36, 415 C. 1903 [1] 631).
- \*24) 4-Nitrotrophenylhydrazid d. Essigsäure. Sm. 207° (B. 37, 3237 C. 1904 [2] 1153).
- 25)  $\beta$ -Amid d.  $\alpha$ -Phenylhydrazin- $\alpha\beta$ -Dicarbonsäure. K, Ag (B. 37, 621 C. 1904 [1] 956).
- $C_8H_9O_5N_5$  2) 4-Nitro-2-Nitrobenzylidenamidoharnstoff. Zers. bei 390° (B. 37, 1864 C. 1904 [1] 1600).
- $C_8H_9O_4N$  \*2) Dimethyläther d. 4-Nitro-1,2-Dioxybenzol. Sm. 99° (B. 37, 2151 C. 1904 [2] 207).

- $C_8H_9O_4N$  \*4) Phenylsulfonamidoessigsäure. Sm. 165—166° (B. 37, 4101 C. 1904 [2] 1727).
- \*30) Dimethyläther d. 4-Nitro-1,3-Dioxybenzol. Sm. 74° (R. 21, 322 C. 1903 [1] 79; R. 23, 119 C. 1904 [2] 206).
- 31) 3-Methyläther d. 2-Nitro-3,5-Dioxy-1-Methylbenzol. Sm. 129—131° (B. 36, 892 C. 1903 [1] 966).
- 32) 3-Methyläther d. 6-Nitro-3,5-Dioxy-1-Methylbenzol. Sm. 104 bis 106° (B. 36, 890 C. 1903 [1] 966).
- 33) 2,4,6-Trioxy-3-Oximidomethyl-1-Methylbenzol. Zers. bei 170° (M. 24, 877 C. 1904 [1] 369).
- 34) 2-Amido-3,5-Dioxy-1-Methylbenzol-4-Carbonsäure.  $HCl + 2H_2O$  (B. 37, 1424 C. 1904 [1] 1418).
- 35)  $\alpha$ -[2-Furanoyl]amidopropionsäure. Sm. 169°. Ba, Ag (B. 37, 2957 C. 1904 [2] 993).
- 36) Amid d. 5-Oxy-1,4-Pyronäthyläther-2-Carbonsäure (A. d. Komen-säure). Sm. 159—160° (G. 33 [2] 264 C. 1904 [1] 45).
- $C_8H_9O_4N_8$  29) 3,4-Dinitro-1-Dimethylamidobenzol. Sm. 174—175° (B. 37, 2615 C. 1904 [2] 517).
- $C_8H_9O_5N_3$  9) 3,5-Dinitro-4-Methylamido-2-Oxy-1-Methylbenzol. Sm. 151°. Methylaminsalz (J. pr. [2] 67, 557 C. 1903 [2] 240).
- 10) 3,5-Dinitro-2-Methylamido-4-Oxy-1-Methylbenzol. Sm. 177° (J. pr. [2] 67, 551 C. 1903 [2] 240).
- 11) Methyläther d. 3,5-Dinitro-2-Methylamido-1-Oxybenzol. Sm. 168° (R. 23, 113 C. 1904 [2] 205).
- 12) Methyläther d. 4,6-Dinitro-3-Methylamido-1-Oxybenzol. Sm. 198° (R. 23, 121 C. 1904 [2] 206).
- $C_8H_9O_5N_5$  2) 3,5-Dinitro-2-Amido-4-Methylnitrosamido-1-Methylbenzol. Sm. 164° (J. pr. [2] 67, 562 C. 1903 [2] 241).
- $C_8H_9O_6N_5$  \*1) 2,4,6-Trinitro-1,3-Di[Methylamido]benzol. Sm. 240° (R. 21, 324 C. 1903 [1] 79).
- 3) 3,5-Dinitro-2-Amido-4-Methylnitramido-1-Methylbenzol. Sm. 178 bis 178,5° (J. pr. [2] 67, 522 C. 1903 [2] 238).
- 4)  $\beta$ -Nitro- $\alpha\alpha'$ -Dimethylisocallitursäure. Zers. bei 168° (A. 333, 125 C. 1904 [2] 894).
- $C_8H_9NCl_2$  7) 3,5-Dichlor-4-Amido-1,2-Dimethylbenzol. Sm. 44,5° (Soc. 85, 278 C. 1904 [1] 1009).
- $C_8H_9NBr_2$  7) 2,4-Dibrom-1-Dimethylamidobenzol. Sd. 275°<sub>748</sub>. (2HCl, PtCl<sub>4</sub>), (2HBr, Br), (2HBr, Br<sub>2</sub>) (B. 37, 2342 C. 1904 [2] 432).
- $C_8H_9NS$  \*4) Phenylamid d. Thioessigsäure. Sm. 75° (B. 36, 586 C. 1903 [1] 830).
- 7) Phenyläther d.  $\alpha$ -Imido- $\alpha$ -Merkaptoäthan. HCl (B. 36, 3466 C. 1903 [2] 1243).
- 8) Methylamid d. Benzolthiocarbonsäure. Sm. 79° (B. 37, 877 C. 1904 [1] 1004).
- $C_8H_9NS_2$  \*7) Benzylester d. Amidodithioameisensäure. Sm. 90° (C. r. 135, 975 C. 1903 [1] 139).
- $C_8H_9NSe$  1) Amid d. 1-Methylbenzol-4-Selencarbonsäure. Sm. 161° u. Zers. (B. 37, 2553 C. 1904 [2] 520).
- $C_8H_9Cl_2Br_2$  1) 3,5-Dichlor-2,3,4-Tribrom-1,1-Dimethyl-1,2,3,4-Tetrahydro-benzol. Sm. 118° u. Zers. (Soc. 85, 272 C. 1904 [1] 805, 1008).
- $C_8H_9Cl_2J$  \*2) 1-Aethylbenzol-4-Jodidchlorid. Sm. 103° (A. 327, 288 C. 1903 [2] 351).
- $C_8H_{10}ON_2$  \*1) Aethylnitrosamidobenzol. Sd. 119,5—120°<sub>15</sub> (B. 36, 2477 C. 1903 [2] 559).
- \*3) 4-Nitroso-1-Dimethylamidobenzol (Soc. 85, 1010 C. 1904 [2] 704).
- \*4) 2-Methylnitrosamido-1-Methylbenzol (A. 327, 109 C. 1903 [1] 1213).
- \*38) s-Acetylphenylhydrazin (C. 1903 [1] 829).
- \*43) Methyläther d.  $\alpha$ -Imido- $\alpha$ -Phenylamido- $\alpha$ -Oxymethan. Ag (C. 1904 [1] 1560).
- 45) Hydrazid d. 1-Methylbenzol-2-Carbonsäure. Sm. 124° (J. pr. [2] 69, 368 C. 1904 [2] 534).
- \*46) Hydrazid d. 1-Methylbenzol-3-Carbonsäure. Sm. 97° (J. pr. [2] 69, 369 C. 1904 [2] 534).
- \*47) Hydrazid d. 1-Methylbenzol-4-Carbonsäure. Sm. 117° (J. pr. [2] 69, 369 C. 1904 [2] 534).

- $C_8H_{10}ON_2$  \*49) Methyl-3,5-Diamidophenylketon. Sm. 133—134° (*J. pr.* [2] 69, 472 *C.* 1904 [2] 596).  
 53) Formyl-2-Amidobenzylamin (*B.* 36, 807 *C.* 1903 [1] 978).  
 54) Monoformyl-2,4-Diamido-1-Methylbenzol. Sm. 115—114° (D.R.P. 138839 *C.* 1903 [1] 427).  
 55) 2-Methylamidobenzaldoxim. Sm. 50,5—51° (*B.* 37, 985 *C.* 1904 [1] 1079).
- $C_8H_{10}OBr_2$  1) 5,6-Dibrom-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 96° (*Soc.* 83, 122 *C.* 1903 [1] 231, 449).
- $C_8H_{10}O_2N_2$  \*6) 3-Nitro-1-Dimethylamidobenzol. Sm. 61° (*A.* 327, 112 *C.* 1903 [1] 1213; *B.* 37, 2616 *C.* 1904 [2] 517).  
 \*55)  $\alpha$ -Phenylhydrazidoessigsäure. Sm. 168°. HCl (*B.* 36, 3879 *C.* 1904 [1] 26).  
 \*56)  $\beta$ -Phenylhydrazidoessigsäure. Sm. 172—173° u. Zers. HCl (*B.* 36, 3879 *C.* 1904 [1] 26).  
 81) 3,5-Diacetyl-4-Methylpyrazol +  $H_2O$ . Sm. 76—90° (114° wasserfrei) (*A.* 325, 185 *C.* 1903 [1] 646).  
 82) Methylester d. 3,4-Diamidobenzol-1-Carbonsäure. Sm. 108—109° (D.R.P. 151725 *C.* 1904 [1] 1588).  
 83) Amid d. 3-Oxyphenylamidoessigsäure. Sm. 145° (*Bl.* [3] 29, 967 *C.* 1903 [2] 1118).  
 84) Amid d. 4-Oxyphenylamidoessigsäure. Sm. 135—136° (*Bl.* [3] 29, 967 *C.* 1903 [2] 1118).  
 85) Hydroxylamid d. Phenylamidoessigsäure. Sm. 118° u. Zers. (*Soc.* 81, 1574 *C.* 1903 [1] 158).  
 86) Phenylhydrazid d. Oxyessigsäure. Sm. 115—120° (*H.* 38, 140 *C.* 1903 [1] 1426).
- $C_8H_{10}O_2N_4$  \*8) Kaffein (D.R.P. 151133 *C.* 1904 [1] 1430).  
 \*11) Cyklohydrazid d. 3,6-Dimethyl-1,2-Dihydro-1,3-Diazin-4,5-Dicarbonsäure. Sm. oberh. 274°. HCl +  $H_2O$  (*B.* 35, 4322 *C.* 1903 [1] 337; *B.* 37, 93 *C.* 1904 [1] 589).  
 21) 3-Amidobenzoylamidoharnstoff. (Kryogenin). Sm. 205° (*C.* 1904 [1] 544).  
 22) Monophenyldihydrazid d. Oxalsäure. Sm. 205—206° (*B.* 37, 2425 *C.* 1904 [2] 341).
- $C_8H_{10}O_2N_6$  \*1) 1,4-Disemicarbazon-1,4-Dihydrobenzol. Zers. bei 241° (*A.* 334, 186 *C.* 1904 [2] 835).
- $C_8H_{10}O_2S_2$  2) 1,3-Dimethylbenzol-4-Thiolsulfonsäure. p-Phenylendiaminsalz (*J. pr.* [2] 70, 392 *C.* 1904 [2] 1721).
- $C_8H_{10}O_3N_2$  \*3) Aethyläther d. 5-Nitro-2-Amido-1-Oxybenzol. Sm. 91° (*B.* 36, 4125 *C.* 1904 [1] 273).  
 \*12) Aethylester d.  $\delta$ -Cyan- $\delta$ -Imido- $\beta$ -Ketobutan- $\gamma$ -Carbonsäure. (Ae. d.  $\alpha$ -Dicyanacetessigsäure). Sm. 122° (*A.* 332, 133 *C.* 1904 [2] 190).  
 18) 3-Methyläther d. 2-Amido-3,4-Dioxy-1-Oximidomethylbenzol. Sm. 151—152° (*C.* 1903 [2] 31).  
 19) 3-Acetyl-1,4-Dimethylpyrazol-5-Carbonsäure. Sm. 185—186° (*B.* 36, 1130 *C.* 1903 [1] 1138).  
 20) Methylester d. 3-Acetyl-4-Methylpyrazol-5-Carbonsäure. Sm. 152° (*B.* 36, 1129 *C.* 1903 [1] 1138).  
 21) Aethylester d.  $\beta$ -Dicyanacetessigsäure. Sm. 178° (*A.* 332, 136 *C.* 1904 [2] 190).  
 22) Aethylester d.  $\gamma$ -Dicyanacetessigsäure. Sm. 211° (*A.* 332, 137 *C.* 1904 [2] 190).
- $C_8H_{10}O_3S$  \*8) 1,4-Dimethylbenzol-2-Sulfonsäure. Na +  $H_2O$  (*C.* 1903 [2] 1051).  
 20) Methylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 28° (*A.* 327, 121 *C.* 1903 [1] 1221).
- $C_8H_{10}O_4N_2$  6) Dimethyläther d. 5-Nitro-2-Amido-1,4-Dioxybenzol. Sm. 158° (D.R.P. 141398 *C.* 1903 [1] 1163; D.R.P. 141975 *C.* 1903 [1] 1380).  
 7)  $\alpha$ -Cyan- $\alpha$ -Oxyessig- $[\beta$ -Cyan- $\alpha$ -Aethoxyläthyl]äthersäure. Sm. 142° (*C.* 1904 [1] 159).
- $C_8H_{10}O_4N_4$  5) 3,5-Dinitro-2-Amido-5-Methylamido-1-Methylbenzol. Sm. 206 bis 208° (*J. pr.* [2] 67, 535 *C.* 1903 [2] 239).  
 6)  $\alpha\alpha'$ -Dimethylisocallitursäure. Sm. 208—210° (*A.* 333, 121 *C.* 1904 [2] 894).

- $C_8H_{10}O_4S$  \*16) 4-Oxy-1-Methylbenzylmethylether-3-Sulfonsäure. Sm. 105—108°. Na +  $\frac{1}{2}H_2O$ , K +  $2H_2O$ , Mg +  $8H_2O$ , Ca +  $12H_2O$ , Ba, Cu +  $6\frac{1}{2}H_2O$ , Zn +  $6\frac{1}{2}H_2O$ , Pb +  $3H_2O$  (Am. 31, 28 C. 1904 [1] 441).
- $C_8H_{10}O_4S_2$  2) 1,3-Di[Methylsulfon]benzol. Sm. 195—196° (J. pr. [2] 68, 320 C. 1903 [2] 1170).
- 3) 1,4-Di[Methylsulfon]benzol. Sm. 255—256° (J. pr. [2] 68, 331 C. 1903 [2] 1171).
- 4) Dimethylester d. Benzol-1,3-Disulfinsäure. Fl. (J. pr. [2] 68, 319 C. 1903 [2] 1170).
- $C_8H_{10}O_5N_2$  C 44,8 — H 4,7 — O 37,4 — N 13,1 — M. G. 214.
- 1) Methylester d.  $\delta$ -Dinitroso- $\gamma$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 169° (Soc. 83, 1239 C. 1903 [2] 1421).
- $C_8H_{10}O_5N_2$  \*2) Diäthylester d. 1,2,3,6-Dioxidiazin-4,5-Dicarbonsäure (Bl. [3] 27, 1165 C. 1903 [1] 228; Bl. [3] 31, 848 C. 1904 [2] 640; C. 1904 [2] 1537).
- \*3) Diäthylester d. Bisanhydronitroessigsäure (Bl. [3] 31, 679 C. 1904 [2] 195).
- $C_8H_{10}NBr$  \*4) 4-Brom-1-Dimethylamidobenzol. (HBr, Br), (HBr, Br<sub>2</sub>) (B. 37, 2341 C. 1904 [2] 432).
- $C_8H_{10}NJ$  3) 2-[ $\beta$ -Jodpropyl]pyridin. Fl. (B. 37, 174 C. 1904 [1] 673).
- $C_8H_{10}N_2J_2$  1) Di[Jodmethylat] d. 1,4-Dimethylhexahydro-1,4-Diazin. Zers. bei 300° (B. 36, 144 C. 1903 [1] 526).
- $C_8H_{10}N_2S$  7)  $\alpha$ -Imido- $\beta$ -Phenylamido- $\alpha$ -Merkaptoäthan. Sm. 165° (B. 36, 4302 C. 1904 [1] 447).
- 8) Methyläther d. Phenylamidoimidomerkaptomethan. Sm. 71°. (2HCl, PtCl<sub>4</sub>), HJ, HNO<sub>3</sub>, Acetat, Pikrat (B. 25, 49; Soc. 83, 554 C. 1903 [1] 1123). — II, 390.
- 9) Amid d. 4-Amidophenylthioessigsäure. Sm. 173° (B. 35, 3938 C. 1903 [1] 38).
- $C_8H_{10}N_2S_2$  \*6) Methylester d.  $\beta$ -Phenylhydrazidodithioameisensäure. Sm. 136° (J. pr. [2] 67, 248 C. 1903 [1] 1264; B. 36, 1365 C. 1903 [1] 1341).
- $C_8H_{10}N_4S$  3) Amid d. Methylphenylamidoazothiocarbonsäure. Sm. 97° (B. 37, 2381 C. 1904 [2] 322).
- $C_8H_{10}N_4S_2$  \*1) 1,3-Phenylendithioharnstoff (D.R.P. 139429 C. 1903 [1] 904).
- $C_8H_{10}Cl_2Br_2$  (1) 3,5-Dichlor-2,5-Dibrom-1,1-Dimethyl-1,2,3,4-Tetrahydrobenzol. Fl. (Soc. 85, 279 C. 1904 [1] 1009).
- $C_8H_{10}Cl_4Si$  1) Siliciumäthylphenyldichlorid. Sd. 228—230° (C. 1904 [1] 637).
- $C_8H_{11}ON$  \*11) Methyläther d. 2-Amido-1-Oxymethylbenzol. Oxalat (C. r. 137, 522 C. 1903 [2] 1060).
- \*13) Methyläther d. 4-Oxy-1-Amidomethylbenzol (B. 36, 371 C. 1903 [1] 577).
- \*44) 4-Dimethylamido-1-Oxybenzol. Sm. 75° (A. 334, 309 C. 1904 [2] 986).
- \*22) Äthyläther d. 4-Amido-1-Oxybenzol. Sd. 120—122°<sub>10</sub> (B. 36, 4102 Anm. C. 1904 [1] 271; C. r. 138, 1038 C. 1904 [1] 1490; B. 36, 2966 C. 1903 [2] 1007).
- \*40) 4-Keto-1,2,6-Trimethyl-1,4-Dihydropyridin +  $3H_2O$ . Sm. 110° (A. 331, 256 C. 1904 [1] 1223).
- \*45) 4-Imido-1-Oxy-1,3-Dimethyl-1,4-Dihydrobenzol. HCl (B. 35, 3889 C. 1903 [1] 26).
- 55)  $\beta$ -Amido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 37, 2483 C. 1904 [2] 420).
- 56) 2-Methyl-6-[ $\beta$ -Oxyäthyl]pyridin. Fl. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 36, 2907 C. 1903 [2] 890).
- $C_8H_{11}ON_3$  \*16)  $\alpha$ -Amido- $\alpha$ -Benzylharnstoff. Sm. 127—128° (B. 37, 2325 C. 1904 [2] 312).
- 19)  $\alpha$ -Amido- $\alpha$ -Methyl- $\beta$ -Phenylharnstoff. Sm. 93—94° (B. 37, 2324 C. 1904 [2] 312).
- 20) 3-Methylphenylamidoharnstoff (Maretin). Sm. 183—184° (C. 1904 [2] 359).
- 21) 1-Acetylamido-2,4-Diamidobenzol. Sm. 158—159° (D.R.P. 151204 C. 1904 [1] 1382).
- 22)  $\alpha$ -Oximido- $\alpha$ -Amido- $\alpha$ -Methylphenylamidomethan (uus-Methylphenylharnstoffoxim). Sm. 102°. HCl, Pikrat (B. 36, 3661 C. 1903 [2] 1324).

- $C_8H_{11}ON_3$  23)  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -Phenylamidoäthan. Sm. 147—148° (B. 36, 4304 C. 1904 [1] 447).
- 24) Inn. Anhydrid d. 2-Semicarbazon-1-Oxymethylenhexahydrobenzol. Sm. 183—185° (und 220°) (A. 329, 117 C. 1903 [2] 1322).
- 25) Inn. Anhydrid d. 3-Semicarbazon-4-Oxymethylen-1-Methyl-R-Pentamethylen. Sm. 115—116° (A. 329, 116 C. 1903 [2] 1322).
- $C_8H_{11}OCl$  \*1) Chlorid d.  $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sd. 84,5—87°<sub>13</sub> (Bl. [3] 29, 656 C. 1903 [2] 487).
- 3) 6-Chlor-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sd. 109°<sub>14</sub> (Soc. 83, 117 C. 1903 [1] 230, 448).
- $C_8H_{11}OBr$  1) 6-Brom-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sd. 129°<sub>25</sub> (Soc. 83, 120 C. 1903 [1] 231, 448).
- $C_8H_{11}O_2N$  \*2) 3-Methyläther d. 6-Amido-3,5-Dioxy-1-Methylbenzol. HCl (B. 36, 891 C. 1903 [1] 966).
- \*6) 1-Aethyläther d. 4-Amido-1,3-Dioxybenzol. HCl (J. pr. [2] 70, 325 C. 1904 [2] 1541).
- \*22) 2-[[ $\beta$ -Dioxyisopropyl]pyridin. Sm. 78° (HCl, 6HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 37, 738 C. 1904 [1] 1089).
- 25) 3-Methyläther d. 2-Amido-3,5-Dioxy-1-Methylbenzol. HCl (B. 36, 893 C. 1903 [1] 966).
- 26) 1-Methyläther d. 5-Amido-2-Oxy-1-Oxymethylbenzol. Sm. 124 bis 126° (D.R.P. 148977 C. 1904 [1] 699).
- 27) 4-Aethyläther d. 4-Oxyphenylhydroxylamin. Sm. 91,5—92° (B. 37, 45 C. 1904 [1] 654).
- 28) 1,2,5-Trimethylpyrrol-3-Carbonsäure. Zers. bei 175° (C. 1903 [2] 1281).
- 29) Methylester d. 2,5-Dimethylpyrrol-3-Carbonsäure. Sm. 119,5°; Sd. 170°<sub>15</sub> (B. 37, 2196 C. 1904 [2] 240).
- 30) Imid d.  $\beta$ -Hexen- $\beta\gamma$ -Dicarbonsäure. Sm. 56—57° (B. 37, 2472 C. 1904 [2] 306).
- 31) Imid d.  $\delta$ -Methyl- $\beta$ -Penten- $\beta\gamma$ -Dicarbonsäure. Sm. 44—45° (B. 37, 2473 C. 1904 [2] 306).
- 32) Imid einer Säure  $C_8H_{12}O_4$  (aus Hämopyrrol). Sm. 63—64° (B. 37, 2472 C. 1904 [2] 306).
- $C_8H_{11}O_2N_3$  10) 4-Nitro-1,2-Di[Methylamido]benzol. Sm. 172° (B. 36, 3969 C. 1904 [1] 177).
- 11) 4-Dimethylamidophenylnitrosohydroxylamin. Ba + 2H<sub>2</sub>O (G. 34 [2] 74 C. 1904 [2] 734).
- $C_8H_{11}O_3N$  24) trans-4-Cyan-4-Oxyhexahydrobenzol-1-Carbonsäure. Sm. 140° (Soc. 85, 434 C. 1904 [1] 1082, 1440).
- $C_8H_{11}O_3P$  10) Methylphenylcarbinolunterphosphorigesäure. Sm. 70° (85°). Pb (C. r. 137, 125 C. 1903 [2] 554; C. 1904 [2] 1708).
- $C_8H_{11}O_4N$  11)  $\gamma$ -Cyan- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 132—133°. K<sub>2</sub> (Soc. 83, 356 C. 1903 [1] 389, 1122).
- $C_8H_{11}O_4P$  3) Oxyphosphinsäure (aus d. Säure  $C_8H_{11}O_3P$ ). Sm. 170°. HBr (C. r. 137, 125 C. 1903 [2] 554).
- 4) Säure (aus Benzaldehyd). Sm. 154° (C. r. 138, 1709 C. 1904 [2] 423).
- $C_8H_{11}O_5Br$  \*2) Diäthylester d. Bromoxallessigsäure. Sd. 140—145°<sub>11</sub> (B. 36, 1732 C. 1903 [2] 38).
- $C_8H_{11}O_5N$  \*1) Diäthylester d. Oxalaminsäure. Sm. 71—72°; Sd. 190°<sub>12-13</sub> (B. 37, 3679 C. 1904 [2] 1495).
- $C_8H_{11}O_6P$  1) 4-Methoxybenzaldehydphosphorsäure (Ch. Z. 25, 1135). — \*III, 59.
- $C_8H_{11}O_7Br_3$  1) Urobromalsäure (C. 1903 [1] 781).
- $C_8H_{11}O_8N_3$  C 34,6 — H 4,0 — O 46,2 — N 15,2 — M. G. 277.
- 1) Dimethyläther d. Nitrodioxydichinolnitrosäure. Na<sub>2</sub> (Am. 29, 115 C. 1903 [1] 709).
- $C_8H_{11}NS$  \*4) Methyläther d. 4-Merkapto-2,6-Dimethylpyridin. Sm. 51°; Sd. 233° (A. 331, 259 C. 1904 [1] 1223).
- 5) 4-Thiocarbonyl-1,2,6-Trimethyl-1,4-Dihydropyridin. Sm. 267 bis 268°. HCl (A. 331, 256 C. 1904 [1] 1223).
- $C_8H_{11}NSe$  1) 1,2,6-Trimethylselenopyrintrioxyd. Sm. 268° (A. 331, 261 C. 1904 [1] 1223).
- 2) Methyläther d. 4-Seleno-2,6-Dimethylpyridin. Sm. 70°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 331, 263 C. 1904 [1] 1223).

- $C_8H_{11}N_2Cl$  3) 4-Chlor-1,2-Di[Methylamido]benzol. Sm. 61° (B. 37, 557 C. 1904 [1] 893).
- $C_8H_{11}N_3S$  \*1)  $\alpha$ -Amido- $\alpha$ -Methyl- $\beta$ -Phenylthioharnstoff (B. 37, 2321 C. 1904 [2] 311).  
 \*3)  $\alpha$ -Amido- $\alpha$ -Phenyl- $\beta$ -Methylthioharnstoff. Sm. 91°. HCl (B. 37, 2331 C. 1904 [2] 314).  
 8) 3[oder 5]-Amido-4[oder 2]-Methylphenylthioharnstoff. Sm. 107° (D.R.P. 152027 C. 1904 [2] 274).
- $C_8H_{12}ON_2$  24) Nitril d.  $\delta$ -Oxy- $\beta$ -Methylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 165—166° (Soc. 85, 1223 C. 1904 [2] 1108).
- $C_8H_{12}ON_4$  2) 4-Semicarbazido-2,6-Dimethylpyridin. Sm. 268—269° u. Zers. (2HCl, PtCl<sub>4</sub>) (B. 36, 1117 C. 1903 [1] 1185).
- $C_8H_{12}O_2N_2$  \*16) 3-Methyl-5-Propylpyrazol-4-Carbonsäure. Sm. 228° u. Zers. (Bl. [3] 27, 1099 C. 1903 [1] 227).  
 17) 2-Methyläther d. 2,6-Dioxy-4-Methyl-5-Aethyl-1,3-Diazin. Sm. 210°. HCl (C. 1904 [2] 30).  
 18) Inn. Anhydrid d. i- $\alpha$ -[2-Pyrroloylamido]propionsäure (Prolylalanin-anhydrid). Sm. 126—129° (B. 37, 2847 C. 1904 [2] 644).  
 19) Nitril d. Oxyessig- $[\beta$ -Cyan- $\alpha$ -Aethoxylpropyl]äthersäure. Sm. 121° (C. 1904 [1] 159).  
 20) Methyl ester d.  $\alpha$ -Cyan- $\beta$ -Aethylamidopropen- $\alpha$ -Carbonsäure. Sm. 73° (Bl. [3] 31, 341 C. 1904 [1] 1135).  
 21) Verbindung (aus d. Säure  $C_8H_{12}O_4N_2$ ) =  $(C_8H_{12}O_2N_2)_x$  (C. 1904 [1] 159).
- $C_8H_{12}O_2N_4$  5) 3,5-Di[ $\alpha$ -Oximidoäthyl]-4-Methylpyrazol +  $\frac{1}{2}H_2O$ . Sm. 217° (A. 325, 186 C. 1903 [1] 647).
- $C_8H_{12}O_2Cl_4$  1) bim. Aethyläther d.  $\beta\beta$ -Dichlor- $\alpha$ -Oxyäthan. Sd. 187—192°<sub>30</sub> (G. 33 [2] 385 C. 1904 [1] 921).
- $C_8H_{12}O_2Br_2$  4) 1,2-Dibrom-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 104° (Soc. 85, 665 C. 1904 [2] 330).
- $C_8H_{12}O_2N_2$  \*2) 2,4,6-Triketo-5,5-Diäthylhexahydro-1,3-Diazin. Sm. 191° (D.R.P. 146496 C. 1903 [2] 1483; D.R.P. 146949 C. 1904 [1] 68; D.R.P. 147278 C. 1904 [1] 68; D.R.P. 147279 C. 1904 [1] 68).  
 \*2) 2,4,6-Triketo-5,5-Diäthylhexahydro-1,3-Diazin (Diäthylmalonylharnstoff; Veronal). Sm. 191°. Na (C. 1903 [1] 1155; D.R.P. 144432 C. 1903 [2] 778; Ar. 242, 401 C. 1904 [2] 1005; A. 335, 338 C. 1904 [2] 1380).  
 11) 2,4,6-Triketo-5-Methyl-5-Propylhexahydro-1,3-Diazin. Sm. 182° (D.R.P. 146496 C. 1903 [2] 1484; A. 335, 344 C. 1904 [2] 1381).
- $C_8H_{12}O_2N_4$  4) 5-Oximido-6-Imido-2,4-Diketo-1,3-Diäthylhexahydro-1,3-Diazin +  $H_2O$  (C. 1904 [2] 1497).
- $C_8H_{12}O_4N_2$  \*1) Tetraacetylhydrazin. Sm. 85°; Sd. 141°<sub>15</sub> (J. pr. [2] 69, 148 C. 1904 [1] 1274).  
 \*5) Diäthylester d. Diazobernsteinsäure. Fl. (B. 37, 1264 C. 1904 [1] 1333).  
 8)  $\alpha$ -Amid d.  $\alpha$ -Imido- $\gamma$ -Ketobutan- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Aethylester. Sm. 142° (A. 332, 134 C. 1904 [2] 190).
- $C_8H_{12}O_4N_8$  C 37,5 — H 4,7 — O 25,0 — N 32,8 — M. G. 256.  
 1) Amid d. Diazoacetyl[Amidoacetyl]amidoessigsäure. Sm. 240° u. Zers. (B. 37, 1296 C. 1904 [1] 1336).
- $C_8H_{12}O_4Br_2$  10) cis- $\gamma\delta$ -Dibrom- $\beta$ -Methylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 168° u. Zers. (Soc. 85, 158 C. 1904 [1] 720).  
 11) trans- $\gamma\delta$ -Dibrom- $\beta$ -Methylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 205—207° (Soc. 83, 779 C. 1903 [2] 191, 423).
- $C_8H_{12}O_5N_2$  2) 1-Nitrosocincholoiponsäure. Sm. 173—174° (B. 30, 1333). — \*III, 635.
- $C_8H_{12}O_5N_8$  C 35,3 — H 4,4 — O 29,4 — N 30,9 — M. G. 272.  
 1) Azid d. Oxyacetyl[Amidoacetyl]amidoessigsäure. Sm. 79—80° (B. 37, 1297 C. 1904 [1] 1336).
- $C_8H_{12}O_6N_2$  \*6) Diäthylester d. Oxalyldi[Amidoameisensäure]. Sm. 173° (B. 36, 746 C. 1903 [1] 827).  
 9) Aethylenester d. Acetylamidoameisensäure. Sm. 174° (B. 36, 3217 C. 1903 [2] 1056).
- $C_8H_{12}O_7N_2$  2) Methylester d.  $\delta\delta$ -Dinitro- $\gamma$ -Keto- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 142—143° (Soc. 83, 1238 C. 1903 [2] 1420).

- $C_8H_{12}O_8N_2$  C 36,4 — H 4,5 — O 48,5 — N 10,6 — M. G. 264.  
 1)  $\beta\gamma$ -Diamidobutan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure.  $Ag_2$  (B. 35, 4124 C. 1903 [1] 135).
- $C_8H_{12}O_{10}N_2$  \*1) Diäthylester d. Dinitroweinsäure. Sm. 27° (Soc. 83, 161 C. 1903 [1] 627).
- $C_8H_{13}ON$  26) 5-Amylloxazol. Sd. 87—87,5°<sub>14</sub> (C. r. 138, 1341 C. 1904 [2] 187).  
 27) Amid d.  $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sm. 91—92° (C. r. 136, 553 C. 1903 [1] 824).
- $C_8H_{13}ON_3$  \*1) 1-Semicarbazon-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 194—195° (A. 329, 375 C. 1904 [1] 517).  
 3) 4-Semicarbazon-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 211—212° (A. 329, 374 C. 1904 [1] 517).  
 4) 3-Semicarbazon-1-Methyl-2-Tetrahydrobenzol. Sm. 207—208° (C. 1903 [1] 329).  
 5) Amid d. 3-Methyl-5-Propylpyrazol-1-Carbonsäure (oder A. d. 5-Methyl-3-Propylpyrazol-1-Carbonsäure). Sm. 95° (Bl. [3] 27, 1088 C. 1903 [1] 226).
- $C_8H_{13}OBr_2$  1) Verbindung (aus  $\alpha$ -Camphylsäure). Sd. 155—160° u. Zers. (Soc. 83, 859 C. 1903 [2] 573).
- $C_8H_{13}O_2N$  24) Verbindung (aus Dimethylamin u. 1,2-Dioxybenzol). Sm. 115° (D.R.P. 141101 C. 1903 [1] 1058).  
 25) Verbindung (aus Dimethylamin u. 1,3-Dioxybenzol). Sm. 82° (D.R.P. 141101 C. 1903 [1] 1058).  
 26) Verbindung (aus Dimethylamin u. 1,4-Dioxybenzol). Sm. 132° (D.R.P. 141101 C. 1903 [1] 1058).
- $C_8H_{13}O_2N_3$  C 52,4 — H 7,1 — O 17,5 — N 23,0 — M. G. 183.  
 1) 6-Imido-2,4-Diketo-1,3-Diäthylhexahydro-1,3-Diazin. Sm. 137°. HCl.  $H_3PO_4$  (C. 1904 [2] 1497).  
 2) 2-Imido-4,6-Diketo-5,5-Diäthylhexahydro-1,3-Diazin (A. 335, 352 C. 1904 [2] 1381).
- $C_8H_{13}O_2Br$  10)  $\beta$ -Brom- $\epsilon$ -Methyl- $\beta$ -Hexen- $\alpha$ -Carbonsäure. Sm. 14—15° (A. 331, 147 C. 1904 [1] 933).  
 11) 1-Brom-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 126° (Soc. 85, 663 C. 1904 [2] 330).  
 12) 5-Brom-1,1-Dimethyl-R-Pentamethylen-2-Carbonsäure. Fl. (Soc. 85, 142 C. 1904 [1] 728).
- $C_8H_{13}O_3N$  \*4) Mesitylsäure (Soc. 85, 1224 C. 1904 [2] 1108).  
 \*11) Methylester d. 1-5-Keto-1-Methyltetrahydropyrrol-2-Methylcarbonsäure (M. d. l-Egoninsäure). Sd. 159°<sub>19,5</sub> (A. 326, 90 C. 1903 [1] 842).  
 12) 5-Oximido-1,1-Dimethyl-R-Pentamethylen-2-Carbonsäure. Sm. 195° (Soc. 85, 139 C. 1904 [1] 728).  
 13) Methylester d. r-5-Keto-1-Methyltetrahydropyrrol-2-Methylcarbonsäure. Sd. 165—170°<sub>19</sub> (A. 326, 89 C. 1903 [1] 842).  
 14) Verbindung (aus Dimethylamin u. 1,2,3-Trioxybenzol). Sm. 163° (D.R.P. 141101 C. 1903 [1] 1058).
- $C_8H_{13}O_3N_3$  8) 4-Semicarbazonhexahydrobenzol-1-Carbonsäure. Zers. bei 200° (Soc. 85, 427 C. 1904 [1] 1439).  
 9) Verbindung (aus  $\alpha$ -Dicyanacetessigsäureäthylester). Zers. bei 209—211° (A. 332, 134 C. 1904 [2] 190).
- $C_8H_{13}O_4N$  14) Methylester d.  $\alpha$ -Butyroximidopropionsäure. Sd. 153—155°<sub>18</sub> (Bl. [3] 31, 1070 C. 1904 [2] 1457).
- $C_8H_{13}O_5N$  4) Verbindung (aus Dimethylamin u. 3,4,5-Trioxybenzol-1-Carbonsäure) (D.R.P. 141101 C. 1903 [1] 1058).
- $C_8H_{13}O_6N$  2) Diäthylester d.  $\alpha$ -Nitroäthan- $\alpha\alpha$ -Dicarbonsäure (C. 1903 [2] 343).
- $C_8H_{13}O_7N$  \*1) Nitrat d. 1- $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäurediäthylester. Sd. 148 bis 151°<sub>26</sub> (B. 35, 4364 C. 1903 [1] 321).  
 C 38,2 — H 5,2 — O 41,0 — N 5,6 — M. G. 251.
- $C_8H_{13}O_8N$  1) Diäthylester d. Mononitroweinsäure. Sm. 46—47° (45—46°) (B. 3, 533; A. ch. [4] 28, 428; Soc. 83, 163 C. 1903 [1] 627; B. 35, 4366 C. 1903 [1] 321; B. 36, 780 C. 1903 [1] 826). — I, 796.
- $C_8H_{13}N_2J$  \*3) Jodmethylester d. s-Methylphenylhydrazin (C. r. 137, 330 C. 1903 [2] 716).
- $C_8H_{14}ON_2$  \*5) 5-Keto-3-Amyl-4,5-Dihydropyrazol. Sm. 195° (C. r. 136, 755 C. 1903 [1] 1019; Bl. [3] 27, 1092 C. 1903 [1] 226).

- $C_8H_{14}ON_2$  \*6) 5-Keto-4-Aethyl-3-Propyl-4,5-Dihydropyrazol. Sm. 165—166° (*Bl.* [3] 31, 593 *C.* 1904 [2] 26).  
 9) 5-Keto-3-Methyl-4-Isobutyl-4,5-Dihydropyrazol. Sm. 237° (*Bl.* [3] 31, 761 *C.* 1904 [2] 343).  
 10) 2,5-Dipropyl-1,3,4-Oxdiazol. Sd. 227° (*J. pr.* [2] 69, 491 *C.* 1904 [2] 599).  
 11) 2,5-Diisopropyl-1,3,4-Oxdiazol. Sd. 209° (*J. pr.* [2] 69, 500 *C.* 1904 [2] 600).  
 12) Amid d.  $\epsilon$ -Cyan- $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. Sm. 142,5° (*C.* 1903 [2] 193).
- $C_8H_{14}O_2N_2$  13) Monomethylacetylhydrazon d.  $\beta\gamma$ -Diketopentan. Sm. 47° (*B.* 36, 3189 *C.* 1903 [2] 939).  
 14) Aethylester d.  $\alpha$ -Diazopentan- $\alpha$ -Carbonsäure. Sd. 70—73°<sub>12</sub> (*B.* 37, 1275 *C.* 1904 [1] 1334).
- $C_8H_{14}O_2N_4$  6) 5,6-Diamido-2,4-Diketo-1,3-Diäthyl-1,2,3,4-Tetrahydro-1,3-Diazin (*C.* 1904 [2] 1497).
- $C_8H_{14}O_3N_2$  4) i- $\alpha$ -[2-Pyrroloylamido]propionsäure (Prolylamin). Sm. 225—230° (*B.* 37, 2845 *C.* 1904 [2] 644).  
 5) Methylamid d.  $\beta$ -Imidopropan- $\alpha\alpha$ -Dicarbonsäuremonoäthylester. Sm. 124—126° (*A.* 329, 347 *C.* 1904 [1] 435).  
 6) Methylmonamid d. 1-Methyltetrahydropyrrol-2,2-Dicarbonsäure. Sm. 137° u. Zers. (*A.* 326, 113 *C.* 1903 [1] 843).
- $C_8H_{14}O_3Cl_4$  1) Diäthyläther d. Di[ $\beta\beta$ -Dichlor- $\alpha$ -Oxyäthyl]äther. Sd. 183—188° (*G.* 33 [2] 405 *C.* 1904 [1] 922).
- $C_8H_{14}O_4N_2$  7) Diäthylester d. bim. Methylenamidoameisensäure (Anhydroformaldehydurethan). Sm. 102° (100°); Sd. 186—190°<sub>20</sub> (*B.* 36, 2207 *C.* 1903 [2] 423; *B.* 36, 40 *C.* 1903 [1] 502).  
 8) Monoureid d. Pentan- $\gamma\gamma$ -Dicarbonsäure. Sm. 162° u. Zers. (*D.R.P.* 144431 *C.* 1903 [2] 813; *A.* 335, 362 *C.* 1904 [2] 1382).
- $C_8H_{14}O_4S$  6) 5-Keto-1,3-Dimethylhexahydrobenzol-1-Sulfonsäure. Na (*B.* 37, 4041 *C.* 1904 [2] 1647).
- $C_8H_{14}O_5N_2$  3) N-Aethylester d.  $\alpha$ -Carboxylamidoacetylamidopropionsäure (Carbäthoxylglycylalanin). Sm. 187,5—188,5° (*B.* 36, 2111 *C.* 1903 [2] 345; *B.* 37, 2191 *C.* 1904 [2] 424).
- $C_8H_{14}O_6N_4$  C 39,0 — H 5,7 — O 32,5 — N 12,8 — M. G. 246.  
 1) Tri[Amidoacetyl]amidoessigsäure. Zers. oberh. 220°. Cu + H<sub>2</sub>O (*B.* 37, 1294 *C.* 1904 [1] 1336; *B.* 37, 2502 *C.* 1904 [2] 426).
- $C_8H_{14}NBr$  4) Bromtropan (Tropidinhydrobromid). Sd. 109—109,5°<sub>17,5</sub> (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr (*A.* 326, 31 *C.* 1903 [1] 778).
- $C_8H_{14}NJ$  2) Jodtropan. HJ (*A.* 326, 30 *C.* 1903 [1] 778).
- $C_8H_{14}N_2S$  5) 2,5-Dipropyl-1,3,4-Thiodiazol. Sd. 127°<sub>13</sub> (*J. pr.* [2] 69, 492 *C.* 1904 [2] 600).  
 6) 2,5-Diisopropyl-1,3,4-Thiodiazol. Sd. 126°<sub>27</sub> (*J. pr.* [2] 69, 502 *C.* 1904 [2] 600).
- $C_8H_{16}ON$  \*22) Tropin (*A.* 326, 23 *C.* 1903 [1] 778).  
 \*27) Pseudotropin. Sm. 108—109°; Sd. 240—241°. Pikrat (*A.* 326, 36 *C.* 1903 [1] 779).  
 47) 3-Methylamido-1-Oxy-2,3,4,5-Tetrahydro-R-Hepten. Sm. 103 bis 104° (*A.* 326, 22 *C.* 1903 [1] 778).  
 48) r-5-Oximido-1,1,2-Trimethyl-R-Pentamethylen. Sm. 105° (*C. r.* 136, 1143 *C.* 1903 [1] 1410).  
 49) 2-Oximido-1,1,3-Trimethyl-R-Pentamethylen. Sm. 60—62° (*A.* 329, 95 *C.* 1903 [2] 1071).  
 50) Oxim d. Verbindung C<sub>8</sub>H<sub>14</sub>O (aus  $\alpha\gamma$ -Dioxybutan). Sd. 180° (*M.* 25, 9 *C.* 1904 [1] 716).  
 51) Anhydrid d. i-Amidolauronsäure. Sm. 209° (*Am.* 28, 485 *C.* 1903 [1] 329).
- $C_8H_{16}ON_8$  \*2) 2-Semicarbazol-1-Methylhexahydrobenzol. Sm. 191—192° (*A.* 329, 376 *C.* 1904 [1] 517).  
 11) Semicarbazolmethylhexahydrobenzol. Sm. 176° (*Bl.* [3] 29, 1050 *C.* 1903 [2] 1437).  
 12) Isopropylidenhydrazid d. Isopropylidenamidoessigsäure. Sm. 79° (*J. pr.* [2] 70, 104 *C.* 1904 [2] 1036).

- $C_8H_{15}OJ$  2) Aethyläther d. 2-Jod-1-Oxyhexahydrobenzol. Sd. 118°<sub>47</sub> (C. r. 135, 1057 C. 1903 [1] 233).
- $C_8H_{15}O_2N$  \*4)  $\gamma$ -Oximido- $\beta$ -Ketooktan. Sm. 54°; Sd. 133°<sub>11</sub> (Bl. [3] 31, 1167 C. 1904 [2] 1700).
- \*5)  $\beta$ -Oximido- $\gamma$ -Ketooktan. Sm. 39°; Sd. 139°<sub>16</sub> (Bl. [3] 31, 1168 C. 1904 [2] 1700).
- \*21) Imid d. Isobuttersäure. Sm. 173—174° (C. r. 137, 129 C. 1903 [2] 552).
- 32)  $\epsilon$ -Oximido- $\delta$ -Ketooktan. Sd. 117—120°<sub>13</sub> (Bl. [3] 31, 1166 C. 1904 [2] 1700).
- 33)  $\gamma$ -Oximido- $\delta$ -Keto- $\beta$ -Methylheptan. Sd. 115—119°<sub>14</sub> (Bl. [3] 31, 1166 C. 1904 [2] 1700).
- 34)  $\epsilon$ -Oximido- $\delta$ -Keto- $\beta$ -Methylheptan. Sm. 38—39°; Sd. 117—118°<sub>12</sub> (Bl. [3] 31, 1166 C. 1904 [2] 1700).
- 35) Methylbetain d. Hexahydropyridin-N-Methylcarbonsäure. Sm. 116—118°. (HCl, AuCl<sub>3</sub>) (B. 36, 4193 C. 1904 [1] 263).
- 36) Aethylester d. 1-Methyltetrahydropyrrol-2-Carbonsäure. Sd. 75 bis 76°<sub>12</sub>. (HCl, AuCl<sub>3</sub>) (A. 326, 126 C. 1903 [1] 844).
- 37) Gem. Imid d. Propionsäure u. Isovaleriansäure. Sm. 68° (C. r. 137, 326 C. 1903 [2] 712).
- 38) Gem. Imid d. Buttersäure u. Isobuttersäure. Sm. 103° (C. r. 137, 326 C. 1903 [2] 712).
- $C_8H_{15}O_3N$  12) Aethylester d.  $\alpha$ -Acetylamidoisobuttersäure. Sm. 87,5° (B. 37, 1923 C. 1904 [2] 196).
- 13) Aethylester d.  $\delta$ -Oximido- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 60°; Sd. 142°<sub>12</sub> (Bl. [3] 31, 1073 C. 1904 [2] 1457).
- 14) Aethylester d. 2-Methyltetrahydrooxazol-1-Methylcarbonsäure. Sm. 31—32° (B. 36, 1283 C. 1903 [1] 1216).
- $C_8H_{15}O_3N_2$  8)  $\epsilon$ -Semicarbazonhexan- $\alpha$ -Carbonsäure. Sm. 144—146° (A. 329, 377 C. 1904 [1] 517).
- 9)  $\delta$ -Semicarbazon- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 185—186° u. Zers. (197°) (A. 329, 99 C. 1903 [2] 1071; Soc. 85, 1220 C. 1904 [2] 1108).
- 10)  $\epsilon$ -Semicarbazon- $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. Sm. 205,5° (Bl. [3] 31, 1152 C. 1904 [2] 1707).
- 11) Aethylester d.  $\alpha$ -Semicarbazonbutan- $\alpha$ -Carbonsäure. Sm. 139—140° (Bl. [3] 31, 1150 C. 1904 [2] 1706).
- 12) Aethylester d.  $\alpha$ -Semicarbazon- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sd. 163—164°<sub>748</sub> (Bl. [3] 31, 163 C. 1904 [1] 869).
- 13) Aethylester d.  $\beta$ -Amidoacetylhydrazonbuttersäure. Sm. 290° u. Zers. (J. pr. [2] 70, 105 C. 1904 [2] 1036).
- 14) Isobutylester d.  $\alpha$ -Semicarbazonvaleriansäure. Sm. 137—138° (Bl. [3] 31, 1073 C. 1904 [2] 1457).
- 15) Butyrat d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 82—83° (C. r. 138, 1275 C. 1904 [2] 93).
- $C_8H_{15}O_4N_3$  3) Aethylester d. Amidoacetylamidoacetylamidoessigsäure. HCl (B. 36, 2984 C. 1903 [2] 1111).
- 4) Amid d.  $\alpha$ -Carbäthoxylamidoacetylamidopropionsäure (Carbäthoxylglycylalaninamid). Sm. 136,5—137,5° (B. 36, 2111 C. 1903 [2] 345).
- $C_8H_{15}O_5N$  3) Dimethylester d. Diäthylhydroxylamin- $\beta\beta'$ -Dicarbonsäure. Fl. HCl, Oxalat (B. 37, 255 C. 1904 [1] 642).
- $C_8H_{15}O_5N_5$  C 36,8 — H 5,7 — O 30,6 — N 26,8 — M. G. 261.
- 1)  $\delta$ -Semicarbazon- $\epsilon\epsilon$ -Dinitro- $\beta$ -Methylhexan. Sm. 148—149° u. Zers. (G. 34 [1] 412 C. 1904 [2] 304).
- $C_8H_{15}NS$  2)  $\alpha$ -Rhodanheptan. Sd. 234—236° (C. 1903 [1] 961).
- $C_8H_{15}N_2J$  3) Jodmethylat d. Hexahydropyridin-N-Methylcarbonsäurenitril. Sm. 192—193° (B. 36, 4193 C. 1904 [1] 263).
- $C_8H_{15}ON_2$  15) 1-Nitroso-2-Methyl-5-Isopropyltetrahydropyrrol. Sd. 114°<sub>10</sub> (C. 1903 [2] 1324).
- $C_8H_{15}O_2N_2$  \*2)  $\beta\gamma$ -Dioximidooktan. Sm. 173° (Bl. [3] 31, 1167 C. 1904 [2] 1700).
- \*23)  $\delta\epsilon$ -Dioximidooktan. Sm. 186—187° (Bl. [3] 31, 1175 C. 1904 [2] 1701).
- \*24)  $\epsilon$ -Dibutyrylhydrazin. Sm. 168°; Sd. 214°<sub>24</sub> (J. pr. [2] 69, 489 C. 1904 [2] 599).
- 25)  $\alpha\delta$ -Di[Acetylamido]butan. Sm. 137° (B. 36, 337 C. 1903 [1] 703).

- $C_8H_{16}O_2N_2$  26)  $\alpha\alpha$ -Di[Acetylamido]- $\beta$ -Methylpropan. Sm. 216° u. Zers. (*M.* 25, 967 *C.* 1904 [2] 1598).  
 27)  $\delta\epsilon$ -Dioximido- $\beta$ -Methylheptan. Sm. 166—167° (*Bl.* [3] 31, 1167 *C.* 1904 [2] 1700).  
 28)  $s$ -Diisobutyrylhydrazin. Sm. 239° (*J. pr.* [2] 69, 499 *C.* 1904 [2] 600).
- $C_8H_{16}O_3N_4$  5)  $s$ -Oximido- $\delta$ -Semicarbazon- $\beta$ -Methylhexan. Sm. 203° u. Zers. (*G.* 34 [1] 411 *C.* 1904 [2] 304).  
 6) Di[4-Morpholyl]tetrazon. Sm. 152° (*B.* 35, 4477 *C.* 1903 [1] 404).
- $C_8H_{16}O_2Cl_2$  2) Dipropyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dioxyäthan. *Sd.* 212—214° (*G.* 33 [2] 419 *C.* 1904 [1] 922).
- $C_8H_{16}O_4N_2$  15) Aethylamid d. d-Weinsäure. Sm. 210—211° (*Soc.* 83, 1361 *C.* 1904 [1] 84).
- $C_8H_{16}O_4N_6$  2) Hydrazid d. Tri[Amidoacetyl]amidoessigsäure. Sm. noch nicht bei 300°. 2HCl (*B.* 37, 1297 *C.* 1904 [1] 1336).  
 C 40,7 — H 6,8 — O 40,7 — N 11,8 — M. G. 236.
- $C_8H_{16}O_6N_2$  1) Methylglykoseureid. Sm. 126° u. Zers. (*R.* 22, 64 *C.* 1903 [1] 1080).  
 2) Diamidodioxykorksäure. Sm. 243° (248—249° u. Zers.) (*B.* 37, 1597 *C.* 1904 [1] 1449; *H.* 42, 293 *C.* 1904 [2] 959).
- $C_8H_{16}NJ$  9) 2- $[\beta$ -Jodpropyl]hexahydropyridin. *Fl.* HJ (*B.* 37, 1888 *C.* 1904 [2] 238).
- $C_8H_{16}N_2S$  8)  $\alpha$ -Allyl- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 31,5—32° (*Ar.* 242, 61 *C.* 1904 [1] 998).
- $C_8H_{17}ON$  \*5)  $\beta$ -Dimethylamido- $\delta$ -Keto- $\beta$ -Methylpentan (*M.* 24, 774 *C.* 1904 [1] 158).  
 \*9)  $\beta$ -Oximidoooktan. *Sd.* 116,5°<sub>15</sub> (*C. r.* 136, 755 *C.* 1903 [1] 1019; *Bl.* [3] 29, 675 *C.* 1903 [2] 487).  
 \*39) 3-Oxy-2,2,5,5-Tetramethyltetrahydropyrrol (*B.* 36, 3367 *C.* 1903 [2] 1186).  
 40)  $\alpha$ -Oximidoooktan. Sm. 58—59° (*C. r.* 138, 699 *C.* 1904 [1] 1066).  
 41)  $\delta$ -Oximidomethylheptan. *Sd.* 126°<sub>47</sub> (*Bl.* [3] 31, 306 *C.* 1904 [1] 1133).  
 42) 3,4,4,6-Tetramethyltetrahydro-1,3-Oxazin. *Sd.* 166—168°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*M.* 25, 835 *C.* 1904 [2] 1240).
- $C_8H_{17}ON_3$  8)  $\gamma$ -Semicarbazon- $\beta\delta$ -Dimethylpentan. Sm. 150—151° (*Bl.* [3] 31, 114 *C.* 1904 [1] 643).
- $C_8H_{17}OCl$  2)  $\alpha$ -Chlor- $\beta$ -Oxy- $\beta\epsilon$ -Dimethylhexan. *Sd.* 96°<sub>23</sub> (*C. r.* 138, 767 *C.* 1904 [1] 1196).
- $C_8H_{17}OBr$  2) 2-Brommenthon. *Fl.* (*B.* 37, 2177 *C.* 1904 [2] 223).  
 3) Verbindung (aus d. Glykol  $C_8H_{18}O_2$ ). *Sd.* 58—60°<sub>14</sub> (*M.* 24, 610 *C.* 1903 [2] 1235).
- $C_8H_{17}O_2N$  \*9) Nitrit d.  $\alpha$ -Oxyoktan. *Sd.* 174—175° (*C. r.* 136, 1564 *C.* 1903 [2] 339).  
 \*10) Nitrit d.  $\beta$ -Oxyoktan. *Sd.* 65°<sub>15</sub> (*C. r.* 136, 1564 *C.* 1903 [2] 339).  
 \*19) Betain d. Triäthylamidoessigsäure. + AuCl<sub>3</sub> (*B.* 36, 4191 *C.* 1904 [1] 263).  
 \*22) Aethylester d. r- $\alpha$ -Amido- $\gamma$ -Methylvaleriansäure. *Sd.* 94°<sub>16</sub> (*Bl.* [3] 31, 1180 *C.* 1904 [2] 1710).  
 \*24) Aethylester d. Isoamylamidoameisensäure. *Sd.* 122—123°<sub>22</sub> (*B.* 36, 2476 *C.* 1903 [2] 559).  
 32) Betain d.  $\delta$ -Trimethylamidovaleriansäure + H<sub>2</sub>O. Sm. 126—127° (228° wasserfrei) (*B.* 37, 1856 *C.* 1904 [1] 1487).  
 33) Betain d.  $\alpha$ -Methyldiäthylamidopropionsäure. Sm. 117—119° (*B.* 36, 4191 *C.* 1904 [1] 263).  
 34) Methylester d.  $\delta$ -Dimethylamidovaleriansäure. *Sd.* 186—189°. (HCl, AuCl<sub>3</sub>) (*B.* 37, 1857 *C.* 1904 [1] 1487).  
 35) Nitrit d.  $\gamma$ -Oxy- $\gamma$ -Aethylhexan. *Sd.* 155° (*C. r.* 136, 1564 *C.* 1903 [2] 339).
- $C_8H_{17}O_3N$  4) Nitrat d.  $\alpha$ -Oxyoktan. *Sd.* 110—112°<sub>20</sub> (*C. r.* 136, 1563 *C.* 1903 [2] 338).
- $C_8H_{17}NBr_2$  5)  $\delta\epsilon$ -Dibrom- $\beta$ -Amido- $\beta\epsilon$ -Dimethylhexan. HBr (*B.* 36, 3367 *C.* 1903 [2] 1186).
- $C_8H_{17}NS_2$  4) norm. Heptylamidodithioameisensäure. Sm. 65° (*C.* 1903 [1] 962).
- $C_8H_{17}N_2Cl$  2) Nitril d. Triäthylchlorammoniumessigsäure. + HgCl<sub>2</sub>, + AuCl<sub>3</sub> (*B.* 36, 4190 *C.* 1904 [1] 263).
- $C_8H_{17}N_2J$  \*2) Nitril d.  $\alpha$ -Methyldiäthyljodammoniumpropionsäure. Sm. 195—196° u. Zers. (192°) (*B.* 36, 4191 *C.* 1904 [1] 263; *B.* 37, 4089 *C.* 1904 [2] 1724).

- $C_8H_{17}N_2J$  \*3) Nitril d. Triäthyljodammoniumessigsäure. Sm. 184° (*B.* 36, 4190 *C.* 1904 [1] 263).
- $C_8H_{18}ON_2$  8)  $\alpha$ -Propyl- $\beta$ -[d-sec. Butyl]harnstoff. Sm. 80° (*Ar.* 242, 70 *C.* 1904 [1] 999).
- 9)  $\alpha$ -Isopropyl- $\beta$ -[d-sec. Butyl]harnstoff. Sm. 134° (*Ar.* 242, 70 *C.* 1904 [1] 999).
- 10)  $\delta$ -Oximido- $\beta$ -Dimethylamido- $\beta$ -Methylpentan. Sm. 46—47; Sd. 136 bis 138°, Oxalat (*M.* 24, 780 *C.* 1904 [1] 158).
- 11) 3, 5-Dimethyltetrahydropyrazol + Aceton. Sm. 68—69° (*B.* 36, 223 *C.* 1903 [1] 522).
- 12) Nitril d. Triäthylammoniumhydroxydessigsäure. HCl, Pikrat (*B.* 36, 4190 *C.* 1904 [1] 263).
- $C_8H_{18}O_2N_6$  2) Semicarbazidsemicarbazon d. Mesityloxyd. Sm. 220° (*B.* 36, 4378 *C.* 1904 [1] 454).
- $C_8H_{18}O_4S$  \*3) Schwefelsäurediisobutylester. Sd. 133—134° (*Am.* 30, 222 *C.* 1903 [2] 937).
- $C_8H_{18}NCl$  12)  $\delta$ - oder - $\epsilon$ -Chlor- $\beta$ -Amido- $\beta$ s-Dimethylhexan. HCl (*B.* 36, 3366 *C.* 1903 [2] 1186).
- $C_8H_{18}N_2S$  3)  $\alpha$ -Propyl- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 53° (*Ar.* 242, 60 *C.* 1904 [1] 998).
- 4)  $\alpha$ -Isopropyl- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 112—112,5° (*Ar.* 242, 60 *C.* 1904 [1] 998).
- $C_8H_{19}ON$  7)  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylpentan. Sd. 78° (*C. r.* 138, 767 *C.* 1904 [1] 1196).
- 8)  $\beta$ -Dimethylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. Sd. 186—190°. (2HCl, PtCl<sub>4</sub>) (*M.* 25, 139 *C.* 1904 [1] 866).
- 9)  $\beta$ -Aethylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. Sd. 189—191°. (2HCl, PtCl<sub>4</sub>) (*M.* 25, 841 *C.* 1904 [2] 1240).
- $C_8H_{19}ClS$  \*1) Methyläthylamylsulfinchlorid. + HgCl<sub>2</sub> (*J. pr.* [2] 66, 459 *C.* 1903 [1] 561).
- \*3) Methylisopropylisobutylsulfinchlorid. + 6 HgCl<sub>2</sub> (*J. pr.* [2] 66, 462 *C.* 1903 [1] 561).
- $C_8H_{20}NCl$  \*2) Tetraäthylammoniumchlorid (*J. pr.* [2] 66, 472 *C.* 1903 [1] 561; *C.* 1904 [1] 923).
- $C_8H_{20}NJ$  \*2) Tetraäthylammoniumjodid. + 2AgJ (*B.* 36, 142 *C.* 1903 [1] 500).
- $C_8H_{20}NJ_3$  \*2) Tetraäthylammoniumtrijodid. Sm. 143° (*C.* 1904 [1] 1401).
- $C_8H_{20}NJ_7$  \*1) Tetraäthylammoniumheptajodid. Sm. 108° (*J. pr.* [2] 67, 348 *C.* 1903 [1] 1297).
- $C_8H_{20}N_2Cl_2$  1) Di[Chlormethylat] d. 1,4-Dimethylhexahydro-1,4-Diazin. + 4HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub>, + 2AuCl<sub>3</sub> (*J. pr.* [2] 66, 520 *C.* 1903 [1] 561; *B.* 36, 144 *C.* 1903 [1] 526; *B.* 37, 3515 *C.* 1904 [2] 1323).
- $C_8H_{20}N_2J_2$  \*1) Di[Jodmethylat] d. 1,4-Dimethylhexahydro-1,4-Diazin. Zers. bei 300° (*J. pr.* [2] 66, 520 *C.* 1903 [1] 561; *J. pr.* [2] 67, 353 *C.* 1903 [1] 1298; *B.* 37, 3515 *C.* 1904 [2] 1323).
- $C_8H_{20}N_2J_{10}$  1) Oktojodid d. 1,4-Dimethylhexahydro-1,4-Diazindijodmethylat. Sm. 120° u. Zers. (*J. pr.* [2] 67, 353 *C.* 1903 [1] 1298).
- $C_8O_8Cl_2Br_2$  1) Anhydrid d. 3,5-Dichlor-4,6-Dibrombenzol-1,2-Dicarbonsäure. Sm. 248—250° (*Soc.* 85, 286 *C.* 1904 [1] 1009).
- 2) Anhydrid d. Dichlordibrombenzol-1,2-Dicarbonsäure. Sm. 261° (D.R.P. 50117). — \*II, 1060.

## — 8 IV —

- $C_8HO_8Cl_2Br$  1) Anhydrid d. 3,5-Dichlor-4-Brombenzol-1,2-Dicarbonsäure. Sm. 170—171° (*Soc.* 85, 276 *C.* 1904 [1] 1009).
- $C_8H_2O_4Cl_2Br_2$  1) 3,5-Dichlor-4,6-Dibrombenzol-1,2-Dicarbonsäure. Sm. 240 bis 241° u. Zers. (*Soc.* 85, 285 *C.* 1904 [1] 1009).
- $C_8H_5O_2NCl_2$  7) Imid d. 3,5-Dichlorbenzol-1,2-Dicarbonsäure. Sm. 208° (*Soc.* 81, 1537 *C.* 1903 [1] 140).
- $C_8H_5O_4NCl_2$  1) Chlorid d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 76—77° (*C.* 1903 [2] 431).
- $C_8H_5O_4Cl_2Br$  1) 3,5-Dichlor-4-Brombenzol-1,2-Dicarbonsäure. Sm. 169—170°. Ag<sub>2</sub> (*Soc.* 85, 276 *C.* 1904 [1] 806, 1009).

- $C_8H_5O_6NCl_2$  2) 3,5-Dichlor-4-Nitrobenzol-1,2-Dicarbonsäure. Sm. 165° u. Zers. (Soc. 85, 277 C. 1904 [1] 1009).
- $C_8H_5O_6N_2Cl_3$  1) Trichlordinitrophenylessigsäure. Sm. 190—191°. Ag (Am. 31, 384 C. 1904 [1] 1409).
- $C_8H_4ON_2Br_2$  1) 6,8-Dibrom-4-Keto-3,4-Dihydro-1,3-Benzodiazin. Zers. oberh. 300° (C. 1903 [2] 1194).
- $C_8H_4O_2NCl$  \*6) Chlorimid d. Benzol-1,2-Dicarbonsäure (D.R.P. 139553 C. 1903 [1] 744).
- $C_8H_4O_3NCl$  4) Chlorformiat d. 4-Oxyphenylisocyanat. Sm. 36—37° (J. pr. [2] 67, 339 C. 1903 [1] 1339).
- $C_8H_4O_3N_2S$  1) Rhodanid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 94° (C. 1904 [1] 1559).
- $C_8H_4O_6N_3Cl_3$  2) Methylnitramid d. 2,4,6-Trichlor-3-Nitrobenzol-1-Carbonsäure. Sm. 118,5° (R. 21, 395 C. 1903 [1] 152).
- $C_8H_6ONCl_2$  3)  $\alpha\alpha$ -Dichlor- $\alpha$ -Benzoylimidomethan (Benzoylisocyanchlorid). Sd. 146—148°<sub>81</sub> (Am. 32, 371 C. 1904 [2] 1507).
- $C_8H_5O_2NS$  \*2) Benzthiazol-1-Carbonsäure. Sm. 108° (B. 37, 3731 C. 1904 [2] 1451).
- $C_8H_5O_2N_2Br_3$  1) 2,4,6-Tribromphenylnitrosamid d. Essigsäure. Sm. 93° (A. 325, 243 C. 1903 [1] 631).
- $C_8H_5O_3N_2Cl$  \*1) Nitril d. 5-Chlor-6-Nitro-2-Oxybenzylmethyläther-1-Carbonsäure (R. 21, 426 C. 1903 [1] 511).
- $C_8H_5O_3N_2Cl_3$  4) Methylamid d. 2,4,6-Trichlor-3-Nitrobenzol-1-Carbonsäure. Sm. 217,25° (R. 21, 390 C. 1903 [1] 152).
- $C_8H_5O_4NCl_2$  2) 3,5-Dichlor-6-Nitro-1-Methylbenzol-2-Carbonsäure. Sm. 187 bis 189° (Soc. 85, 281 C. 1904 [1] 1009).
- $C_8H_5O_4N_2Br$  \*1)  $\beta$ -Brom- $\beta$ -Nitro- $\alpha$ -[4-Nitrophenyl]äthen. Sm. 135° (A. 325, 14 C. 1903 [1] 287).
- $C_8H_5ONCl$  3) Chlormethylanthranil. Sm. 97,5—98°. + 1½ HgCl<sub>2</sub> (B. 36, 1622 C. 1903 [2] 36).
- 4) 4-Chlor-1-Methylbenzoxazol. Sm. 53—54°; Sd. 218—220°. HCl, (2HCl, PtCl<sub>4</sub>) (Am. 32, 42 C. 1904 [2] 698).
- $C_8H_5ONJ_3$  2) 2,4,5-Tribromphenylamid d. Essigsäure. Sm. 227° (C. r. 137, 1066 C. 1904 [1] 266).
- $C_8H_5ON_2S$  3) Amid d. Benzthiazol-1-Carbonsäure. Sm. 228—230° (B. 37, 3732 C. 1904 [2] 1451).
- $C_8H_5O_2NBr$  \*1)  $\beta$ -Brom- $\beta$ -Nitro- $\alpha$ -Phenyläthen. Sm. 67° (A. 325, 8 C. 1903 [1] 286).
- $C_8H_5O_2NBr_3$  \*1) p-Tribromphenylamidoessigsäure. Sm. 200° u. Zers. (B. 37, 834 C. 1904 [1] 1201).
- 4) 2,3,6-Tribrom-4-Acetylamido-1-Oxybenzol. Sm. 224° u. Zers. (Soc. 81, 1478 C. 1903 [1] 23, 144).
- $C_8H_5O_2N_3Br_3$  1)  $\alpha$ -[2,4,6-Tribromphenyl]hydrazon- $\alpha$ -Nitroäthan. Sm. 116—117° (B. 36, 3835 C. 1904 [1] 19).
- $C_8H_5O_3NBr$  10)  $\alpha$ -Brom- $\alpha$ -Nitromethylphenylketon. Sm. 61,5° (A. 325, 13 C. 1903 [1] 287).
- 6) Aethyläther d. 4,5,6-Tribrom-2-Nitro-1-Oxybenzol. Sm. 74° (Am. 30, 71 C. 1903 [2] 355).
- $C_8H_5O_3N_2Cl_2$  \*7) 2,6-Dichlor-4-Nitrophenylamid d. Essigsäure. Sm. 214—215° (C. 1903 [2] 550).
- $C_8H_5O_4NCl$  \*14) Methyl ester d. 5-Chlor-2-Nitrobenzol-1-Carbonsäure (C. 1903 [2] 1174).
- \*15) Methyl ester d. 4-Chlor-3-Nitrobenzol-1-Carbonsäure (C. 1903 [2] 1174).
- \*16) Methyl ester d. 6-Chlor-3-Nitrobenzol-1-Carbonsäure (C. 1903 [2] 1174).
- 18) Acetat d. 4-Chlor-2-Nitro-1-Oxybenzol (Am. 32, 37 C. 1904 [2] 698).
- $C_8H_5O_4NBr_3$  \*2) Dimethyläther d. 4,5,6-Tribrom-3-Nitro-1,2-Dioxybenzol. Sm. 116—117° (C. r. 135, 968 C. 1903 [1] 144).
- $C_8H_5O_4N_2Cl_2$  5) 4,6-Dichlor-3,5-Dinitro-1,2-Dimethylbenzol. Sm. 175—176° (Soc. 85, 284 C. 1904 [1] 1009).
- $C_8H_5O_6N_4Br_2$  1) 4,5-Dibrom-2,6-Dinitro-1-Aethylnitroamidobenzol. Sm. 106° (R. 21, 416 C. 1903 [1] 506).

- $C_8H_5O_7N_3Cl$  1) Aethyläther d. 3-Chlor-2,4,6-Trinitro-1-Oxybenzol. Sm. 51° (*R.* 21, 325 *C.* 1903 [1] 80).
- $C_8H_7ONCl_2$  \*3) 2,4-Dichlorphenylamid d. Essigsäure. Sm. 145—146° (*C.* 1903 [2] 550).
- \*10) 4-Chlorphenylechloramid d. Essigsäure (*C.* 1903 [1] 22).
- 13) Methylantranildichlorid. Sm. 101—101,5° (*Ar.* 240, 437 *C.* 1902 [2] 939; *B.* 36, 1621 *C.* 1903 [2] 36).
- $C_8H_7ONJ_2$  \*1) 3,5-Dijodphenylamid d. Essigsäure (*C. r.* 136, 237 *C.* 1903 [1] 574).
- $C_8H_7ONS_2$  1) Gem. Anhydrid d. Benzolcarbonsäure u. Amidodithioameisensäure. Sm. 108—109° (*B.* 36, 3527 *C.* 1903 [2] 1326).
- $C_8H_7ON_3S$  3) 3-Merkapto-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 195°  $K + H_2O$  (*B.* 36, 3151 *C.* 1903 [2] 1074; *B.* 37, 623 *C.* 1904 [1] 957).
- $C_8H_7O_2NBr_2$  \*9) 2,6-Dibrom-4-Acetylamido-1-Oxybenzol. Sm. 185—186° (178 bis 179°) (*Soc.* 81, 1477 *C.* 1903 [1] 23, 144).
- $C_8H_7O_2NS$  1) 4-Amid d. Benzol-1-Carbonsäure-4-Thiocarbonsäure. Sm. 247° (*B.* 37, 3222 *C.* 1904 [2] 1121).
- 2) S-Phenylmonamid d. Thiooxalsäure. Sm. 101—102°. Na, Anilinsalz (*B.* 37, 3713 *C.* 1904 [2] 1449).
- $C_8H_7O_2N_2Br$  4) 4-Bromphenylnitrosamid d. Essigsäure. Zers. bei 88° (*A.* 325, 242 *C.* 1903 [1] 631).
- $C_8H_7O_2N_2Br_3$  2) 4,5,6-Tribrom-2-Nitro-1-Aethylamidobenzol. Sm. 130° (*R.* 21, 416 *C.* 1903 [1] 506).
- $C_8H_7O_2N_3Cl_2$  2) 3,5-Dichlor-2-Oxy-1-Semicarbazonmethylbenzol. Sm. 227° u. Zers. (*B.* 37, 4028 *C.* 1904 [2] 1718).
- 3) 3,5-Dichlor-4-Oxy-1-Semicarbazonmethylbenzol. Sm. 236—237° u. Zers. (*B.* 37, 4033 *C.* 1904 [2] 1719).
- $C_8H_7O_2N_4Cl_3$  1) 2,6-Diketo-8-Trichlormethyl-3,7-Dimethylpurin. Sm. 211—212° (*D.R.P.* 146714 *C.* 1903 [2] 1485).
- $C_8H_7O_3NBr_2$  \*4) Aethyläther d. 2,6-Dibrom-4-Nitro-1-Oxybenzol. Sm. 58—59° (*Am.* 30, 63 *C.* 1903 [2] 354).
- 7) Aethyläther d. 3,6-Dibrom-2-Nitro-1-Oxybenzol. Sm. 45° (*Am.* 28, 470 *C.* 1903 [1] 323).
- 8) Aethyläther d. 2,5-Dibrom-4-Nitro-1-Oxybenzol. Sm. 126° (*Am.* 28, 465 *C.* 1903 [1] 323).
- $C_8H_7O_3NS$  \*3) Methylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 129° (*Am.* 30, 278 *C.* 1903 [2] 1120).
- $C_8H_7O_3N_2Cl$  \*9) Methylamid d. 4-Chlor-3-Nitrobenzol-1-Carbonsäure (*C.* 1903 [2] 1174).
- 15) Methyläther d.  $\alpha$ -Chlorimido- $\alpha$ -Oxy- $\alpha$ -[3-Nitrophenyl]methan. Sm. 86,5—87° (*Am.* 30, 403 *C.* 1904 [1] 239).
- 16) Methyläther d. isom.  $\alpha$ -Chlorimido- $\alpha$ -Oxy- $\alpha$ -[3-Nitrophenyl]methan. Sm. 81—82° (*Am.* 30, 406 *C.* 1904 [1] 239).
- 17) Methylchloramid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 77° (*Am.* 30, 408 *C.* 1904 [1] 239).
- 18) 3-Nitrophenylamid d. Chloressigsäure. Sm. 101—102° (*C.* 1903 [2] 110).
- $C_8H_7O_3N_3S$  2) 2-Imido-4-Keto-3-[3-Nitrophenyl]tetrahydrothiazol. Sm. 183—184° (*C.* 1903 [2] 110).
- $C_8H_7O_3N_4Cl$  2) 4-Chlor-2-Nitro-1-Semicarbazonmethylbenzol. Sm. 269—270° (*B.* 36, 3301 *C.* 1903 [2] 1173; *D.R.P.* 149748 *C.* 1904 [1] 909).
- $C_8H_7O_3N_4Br$  1) 4-Brom-2-Nitrobenzylidenamidoharnstoff. Sm. 276° (*B.* 37, 1868 *C.* 1904 [1] 1601).
- $C_8H_7O_4NCl_2$  2) Dimethyläther d. p-Dichlor-3-Nitro-1,2-Dioxybenzol. Sm. 110—111° (*C. r.* 135, 969 *C.* 1903 [1] 145).
- 3) Dimethyläther d. p-Dichlor-4-Nitro-1,2-Dioxybenzol. Sm. 46—47° (*C. r.* 135, 969 *C.* 1903 [1] 145).
- $C_8H_7O_4NBr_2$  4) Dimethyläther d. Dibromnitrodioxybenzol (aus 3,4,5-Tribrom-1,2-Dinitrobenzol). Sm. 81° (*Am.* 30, 70 *C.* 1903 [2] 355).
- $C_8H_7O_4N_2Br$  5) 6-Brom-2-Nitro-4-Acetylamido-1-Oxybenzol. Sm. 230° (*Soc.* 81, 1478 *C.* 1903 [1] 23, 144).
- $C_8H_7O_4ClS$  3) 3-Chlorid d. Benzol-1-Carbonsäuremethylester-3-Sulfonsäure. Sm. 63—65° (*M.* 23, 1120 *C.* 1903 [1] 396).

- $C_8H_7O_5N_2Cl$  2) Aethyläther d. 5-Chlor-2,4-Dinitro-1-Oxybenzol. Sm. 112° (*R.* 23, 123 *C.* 1904 [2] 206).
- $C_8H_7O_5N_3S$  \*1) 3- oder 6-Nitro-2,4-Dimethyl-1-Diazobenzol-5-Sulfonsäure (*A.* 330, 60 *C.* 1904 [1] 1142);
- $C_8H_7O_7NS$  \*1) 1-Methylester d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Na (*Am.* 30, 388 *C.* 1904 [1] 275).
- 2) 3-Amidobenzol-1,2-Dicarbonsäure-*p*-Sulfonsäure (D.R.P. 109487 *C.* 1900 [2] 408). — \*II, 1062.
- 3) 1-Methylester d. 2-Nitrobenzol-1-Carbonsäure-4-Sulfonsäure + 2H<sub>2</sub>O. Sm. 95—97° (*M.* 23, 1142 *C.* 1903 [1] 397).
- 4) 4-Methylester d. 2-Nitrobenzol-1-Carbonsäure-4-Sulfonsäure. Sm. 140—142°. Ag (*M.* 23, 1143 *C.* 1903 [1] 397).
- $C_8H_7O_5N_3Br$  1) 4-Brom-2,6-Dinitro-1,3-Di[Methylnitramido]benzol. Sm. 173° u. Zers. (*R.* 21, 415 *C.* 1903 [1] 506).
- $C_8H_8ONCl$  \*13) Phenylchloramid d. Essigsäure (*R.* 21, 367 *C.* 1903 [1] 141; *C.* 1903 [1] 22; *Am.* 29, 299 *C.* 1903 [1] 1165; *R.* 22, 290 *C.* 1903 [2] 242).
- \*16) 4-Chlorphenylamid d. Essigsäure (*R.* 21, 367 *C.* 1903 [1] 141; *R.* 22, 290 *C.* 1903 [2] 242).
- \*22) Methylanilid d. 2-Chlorbenzol-1-Carbonsäure. Sm. 92—94° (*Soc.* 83, 768 *C.* 1903 [2] 200, 437; *C.* 1903 [2] 1174).
- \*25) Methylchloramid d. Benzolcarbonsäure. Fl. (*Am.* 29, 310 *C.* 1903 [1] 1166).
- 27) Methyl-3-Chlor-4-Amidophenylketon. Sm. 92° (*Soc.* 85, 341 *C.* 1904 [1] 1404).
- 28) 4-Methylphenylchloramid d. Ameisensäure. Sm. 49—50°. Zers. bei 140° (*Am.* 29, 306 *C.* 1903 [1] 1166).
- $C_8H_8ONBr$  \*7) Phenylbromamid d. Essigsäure. Sm. 94—95° (*Am.* 29, 303 *C.* 1903 [1] 1166).
- \*10) 4-Bromphenylamid d. Essigsäure. Sm. 167—168° (*C.* 1903 [2] 550).
- 13) 4-Methylphenylbromamid d. Ameisensäure. Sm. 80° (*Am.* 29, 306 *C.* 1903 [1] 1166).
- $C_8H_8ONJ$  \*2) 2-Jodphenylamid d. Essigsäure. Sm. 109—110° (*M.* 25, 957 *C.* 1904 [2] 1638).
- \*3) 3-Jodphenylamid d. Essigsäure. Sm. 119,5° (*M.* 25, 958 *C.* 1904 [2] 1638).
- \*4) 4-Jodphenylamid d. Essigsäure. Sm. 181° (*M.* 25, 948 *C.* 1904 [2] 1638).
- $C_8H_8ON_2S$  3) O-Amid d. Phenylthiooxaminsäure. Sm. 169—170° (*B.* 37, 3719 *C.* 1904 [2] 1450).
- 4) S-Amid d. Phenylthiooxaminsäure. Sm. 176° (*B.* 37, 3716 *C.* 1904 [2] 1449).
- $C_8H_8OClBr$  1)  $\beta$ -Bromäthyläther d. 2-Chlor-1-Oxybenzol. Sd. 140—142°<sub>13</sub> (*B.* 36, 2874 *C.* 1903 [2] 834).
- $C_8H_8O_2NCl$  15) 4-Chlor-2-Acetylamido-1-Oxybenzol. Sm. 176° (*Am.* 32, 40 *C.* 1904 [2] 698).
- 16) 2-Chlor-4-Acetylamido-1-Oxybenzol. Sm. 144° (D.R.P. 147530 *C.* 1904 [1] 233).
- 17) 2-Chlorphenylamidoessigsäure. Sm. 166—167° (*B.* 37, 4082 *C.* 1904 [2] 1723).
- 18) Acetat d. 4-Chlor-2-Amido-1-Oxybenzol. HCl, (2HCl, PtCl<sub>4</sub>) (*Am.* 32, 38 *C.* 1904 [2] 698).
- $C_8H_8O_2NBr$  22) 4-Brom-2-Nitromethyl-1-Methylbenzol. Sm. 65° (*C.* 1904 [2] 200).
- $C_8H_8O_2N_2Cl_2$  1) 4,5-Dichlor-2-Nitro-1-Aethylamidobenzol. Sm. 120° (*R.* 21, 421 *C.* 1903 [1] 504).
- $C_8H_8O_2N_2Br_2$  2) 4,5-Dibrom-2-Nitro-1-Aethylamidobenzol. Sm. 123° (*R.* 21, 416 *C.* 1903 [1] 506).
- $C_8H_8O_2N_2S$  6) Nitril d. Phenylsulfonamidoessigsäure. Sm. 76—77°. Na (*B.* 37, 4100 *C.* 1904 [2] 1727).
- 7) Methylecyanamid d. Benzolsulfonsäure. Sm. 45—46°; Sd. 205°<sub>30</sub> (*B.* 37, 2811 *C.* 1904 [2] 593).
- $C_8H_8O_2N_2S_2$  1) 4-Nitrobenzylester d. Amidodithioameisensäure. Sm. 135° (*C. r.* 135, 975 *C.* 1903 [1] 139).

- $C_8H_5O_2N_3Cl$  4) 5-Chlor-2-Oxy-1-Semicarbazonmethylbenzol. Sm. 286—287° (B. 37, 4025 C. 1904 [2] 1717).
- 5) 3-Chlor-4-Oxy-1-Semicarbazonmethylbenzol. Sm. 210° u. Zers. (B. 37, 4033 C. 1904 [2] 1718).
- $C_8H_5O_2N_4Cl_2$  \*1) 8-Chlor-2,6-Diketo-3-Chlormethyl-1,7-Dimethylpurin (D.R.P. 151190 C. 1904 [1] 1586).
- 2) 8-Chlor-2,6-Diketo-7-Chlormethyl-1,3-Dimethylpurin. Sm. 145° (D.R.P. 145880 C. 1903 [2] 1036; D.R.P. 153122 C. 1904 [2] 626).
- $C_8H_5O_3NCl$  8) Methyläther d. 5-Chlor-3-Nitro-4-Oxy-1-Methylbenzol. Sm. 40—41° (A. 328, 312 C. 1903 [2] 1246).
- 9) Äthyläther d. 5-Chlor-2-Nitro-1-Oxybenzol. Sm. 63° (B. 21, 322 C. 1903 [1] 79).
- $C_8H_5O_3N_2Br_2$  2) Monolaktam d.  $\alpha\delta$ -Dibrom- $\beta\gamma$ -Diamidobutan- $\alpha\delta$ -Dicarbonsäure (B. 35, 4126 C. 1903 [1] 136).
- $C_8H_5O_3N_2S$  \*1) 2,4-Dimethyl-1-Diazobenzol-5-Sulfonsäure (A. 330, 46 C. 1904 [1] 1141).
- $C_8H_5O_4N_2S$  2) 3-Nitrophenylamid d. Äthensulfonsäure. Sm. 119° (B. 36, 3630 C. 1903 [2] 1327).
- $C_8H_5O_4I_2S_2$  \*1) 1,3-Di[Jodmethylsulfon]benzol. Sm. 248° (J. pr. [2] 68, 324 C. 1903 [2] 1171).
- $C_8H_5O_5N_2S$  2) 4-Nitro-1-Acetylamidobenzol-3-Sulfonsäure (D.R.P. 150982 C. 1904 [1] 1235).
- $C_8H_5O_5N_3Br$  1) 4-Brom-2,6-Dinitro-3-Methylamido-1-Methylnitramidobenzol. Sm. 179° (B. 21, 415 C. 1903 [1] 505).
- $C_8H_5O_5N_3S$  1) 2,4-oder 4,6-Dinitro-5-Oxy-1,3-Dimethylbenzol-6 oder 2-Sulfonsäure. K (B. 37, 3478 C. 1904 [2] 1213).
- $C_8H_5NClIS$  3) 4-Chlorphenylamid d. Thioessigsäure. Sm. 143° (B. 37, 876 C. 1904 [1] 1004).
- $C_8H_5ONBr_2$  \*4) Äthyläther d. 2,6-Dibrom-4-Amido-1-Oxybenzol. Sm. 107° (67°?). HCl (Am. 30, 66 C. 1903 [2] 355).
- $C_8H_5ONSe$  1) Phenylamid d. Selenessigsäure. Cu (Ar. 241, 203 C. 1903 [2] 103).
- $C_8H_5ON_2Cl$  7) Amid d. 4-Chlorphenylamidoessigsäure. Sm. 125—126° (Bl. [3] 29, 967 C. 1903 [2] 1118).
- 8) 2-Chlor-4-Amidophenylamid d. Essigsäure. Sm. 133° (D.R.P. 146654 C. 1903 [2] 1485).
- $C_8H_5O_2N_3S$  2)  $\beta$ -Amid d.  $\alpha$ -Phenylhydrazin- $\alpha$ -Carbonsäure- $\beta$ -Thiocarbonsäure. K + 2H<sub>2</sub>O (B. 37, 622 C. 1904 [1] 957).
- $C_8H_5O_3N_3S_2$  1) Diacetylchrysean. Sm. 216° u. Zers. (B. 36, 3547 C. 1903 [2] 1379).
- $C_8H_5O_3ClIS$  \*12) Chlorid d. 4-Oxy-1-Methylbenzolzomethyläther-3-Sulfonsäure. Sm. 83,5—84° (Am. 31, 36 C. 1904 [1] 441).
- $C_8H_5O_4NS$  15)  $\alpha$ -Benzoylamidomethan- $\alpha$ -Sulfonsäure. Na (B. 37, 4095 C. 1904 [2] 1726).
- 16) 2-Methylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. K<sub>2</sub>, Ba (Am. 30, 281 C. 1903 [2] 1120).
- $C_8H_5O_5NS$  \*13) 3-Amid d. 4-Oxybenzolzomethyläther-1-Carbonsäure-3-Sulfonsäure. Sm. 276—277°. Na + 3H<sub>2</sub>O, K + 1½H<sub>2</sub>O, Ca + 5H<sub>2</sub>O, Ba + 4½H<sub>2</sub>O, Mg + 6[10½]H<sub>2</sub>O (Am. 31, 37 C. 1904 [1] 441).
- 16) 2-Sulfomethylamidobenzol-1-Carbonsäure (D.R.P. 155628 C. 1904 [2] 1444).
- 17) 4-Acetylamido-1-Oxybenzol-2-Sulfonsäure (D.R.P. 147530 C. 1904 [1] 233).
- 18) 2-Methylester d. Phenylsulfaminsäure-2-Carbonsäure. Na (D.R.P. 147552 C. 1904 [1] 129).
- 19) 3-Methylester d. Phenylsulfaminsäure-3-Carbonsäure. Na (D.R.P. 147552 C. 1904 [1] 129).
- 20) 4-Methylester d. Phenylsulfaminsäure-4-Carbonsäure. Na (D.R.P. 147552 C. 1904 [1] 129).
- $C_8H_{10}ON_2S$  \*3) Methyläther d. 2-Oxyphenylthioharnstoff. Sm. 152° (B. 36, 3322 C. 1903 [2] 1169).
- $C_8H_{10}O_5N_4S$  1) 2,6-Diketo-1,3,7-Trimethylpurin-8-Sulfonsäure (Kaffeinsulfonsäure) (D.R.P. 74045). — \*III, 707.
- $C_8H_{10}NCl_2P$  2) Äthylphenylamidodichlorphosphin. Sd. 143°<sub>12</sub> (A. 326, 222 C. 1903 [1] 866).

- $C_8H_{11}ONCl_2$  1) Chlormethyläther d.  $\beta$ -Chlor- $\alpha$ -Oxyäthan + Pyridin. 2 +  $PtCl_4$ , +  $AuCl_3$  (A. 330, 127 C. 1904 [1] 1064).
- $C_8H_{11}O_2NS$  \*14) Dimethylamid d. Benzolsulfonsäure. Sm. 47—48° (B. 36, 2706 C. 1903 [2] 829).
- \*15) Aethylamid d. Benzolsulfonsäure. Sm. 57—58° (B. 36, 2706 C. 1903 [2] 829; B. 37, 3803 C. 1904 [2] 1564).
- 21) Methylamid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 74—75° (Am. 30, 281 C. 1903 [2] 1120).
- $C_8H_{11}O_3NS$  \*4) 1-Dimethylamidobenzol-4-Sulfonsäure. Zers. bei 265—266° (C. 1903 [1] 573).
- \*9) 4-Amido-1,3-Dimethylbenzol-6-Sulfonsäure. Ba (C. 1903 [1] 573).
- \*10) 2-Amido-1,4-Dimethylbenzol-5-Sulfonsäure (C. 1903 [1] 573).
- \*13) 2,4-Dimethylphenylsulfaminsäure. Sm. 200° (D.R.P. 151134 C. 1904 [1] 1381).
- \*19) Amid d. 4-Oxy-1-Methylbenzolmethyläther-3-Sulfonsäure. Sm. 180—181° (Am. 31, 36 C. 1904 [1] 441).
- \*22) 4-Amido-1,3-Dimethylbenzol-5-Sulfonsäure (C. 1903 [1] 573).
- 25) 1,2,6-Trimethylthiopyrintrioxyd +  $2H_2O$  (A. 331, 260 C. 1904 [1] 1223).
- 26) 1-Dimethylamidobenzol-3-Sulfonsäure. Zers. bei 265—266° (C. 1903 [1] 573).
- 27) Methylphenylamidomethan- $\alpha$ -Sulfonsäure. Na (D.R.P. 153193 C. 1904 [2] 575).
- 28)  $\beta$ -Oxyäthylamid d. Benzolsulfonsäure. Sd. 280°<sub>15</sub>. Na (B. 36, 1279 C. 1903 [1] 1215).
- $C_8H_{11}O_4NS$  5) 4-Amido-1-Oxybenzolmethyläther-3-Sulfonsäure (D.R.P. 146655 C. 1903 [2] 1301).
- $C_8H_{11}NClJ$  1) Jodmethylat d. 4-Chlor-2,6-Dimethylpyridin +  $2H_2O$ . Sm. 233—234° (wasserfrei) (A. 331, 255 C. 1904 [1] 1223).
- $C_8H_{12}ONCl$  4) Verbindung (aus Chlormethyläthyläther u. Pyridin). 2 +  $PtCl_4$ , +  $AuCl_3$  (A. 334, 65 C. 1904 [2] 949).
- $C_8H_{12}ON_2S$  2) Methyläther d. 2-Merkapto-4-Keto-6-Methyl-5-Aethyl-3,4-Dihydro-1,3-Diazin. Sm. 203° (Am. 29, 489 C. 1903 [1] 1309).
- 3) Diäthyläther d. 2-Merkapto-4-Oxy-1,3-Diazin. Sd. 137—138°<sub>18</sub> (Am. 31, 597 C. 1904 [2] 242).
- 4) Aethyläther d. 2-Merkapto-4-Keto-5,6-Dimethyl-3,4-Dihydro-1,3-Diazin. Sm. 156° (Am. 29, 488 C. 1903 [1] 1309).
- $C_8H_{12}O_2N_2S$  8) 2-Thiocarbonyl-4,6-Diketo-5,5-Diäthylhexahydro-1,3-Diazin. Sm. 180° (A. 335, 350 C. 1904 [2] 1381).
- $C_8H_{12}O_2N_4S$  1) 1-Ureido-2-Thiocarbonyl-4-Keto-5-Methyl-3-Allyltetrahydroimidazol. Sm. 167° (C. 1904 [2] 1027).
- $C_8H_{12}O_4NBr$  1) Verbindung (aus d. Verb.  $C_8H_{13}O_4NBr_3$ ). Sm. 78° (C. 1903 [1] 816).
- $C_8H_{12}O_5N_3Cl$  1) Chloracetylbis[Amidoacetyl]amidoessigsäure (Chloracetyldiglycylglycin). Sm. 224° (B. 37, 2501 C. 1904 [2] 426).
- $C_8H_{12}O_6N_2S_4$  \*1) 4-Amido-1-Dimethylamidobenzol-2,5-Di[Thiosulfonsäure].  $K_2$  (Soc. 83, 1212 C. 1903 [2] 1329).
- $C_8H_{12}O_{10}N_2S_4$  1) Benzol-1,3-Di[Sulfonamidomethansulfonsäure].  $Na_2$  (B. 37, 4102 C. 1904 [2] 1727).
- $C_8H_{13}O_3NBr_2$  3) i- $\alpha$ -[ $\alpha\delta$ -Dibromvaleryl]amidopropionsäure. Sm. 113—116° (B. 37, 2844 C. 1904 [2] 644).
- $C_8H_{13}O_4NBr_2$  1) Verbindung (aus  $\beta$ -Nitro- $\alpha\gamma$ -Dioxy- $\beta$ -Methylpropan). Sm. 115—116° (C. 1903 [1] 816).
- $C_8H_{13}O_4N_2Cl$  1) Aethyl ester d. Chloracetylamidoacetylamidoessigsäure. Sm. 153 bis 154° (B. 36, 2113 C. 1903 [2] 345).
- $C_8H_{14}O_2N_2S$  2) S-Methylamid d.  $\beta$ -Imidopropan- $\alpha$ -Thiocarbonsäure- $\alpha$ -Carbon-säureäthylester. Sm. 145—146° (A. 329, 347 C. 1904 [1] 435).
- $C_8H_{14}O_4N_4Se_2$  1) Di[ $\beta$ -Methylureid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure (Diselenglykolylmethylharnstoff). Sm. 183—184° (Ar. 241, 191 C. 1903 [2] 103).
- $C_8H_{15}OJHg$  1)  $\gamma$ -Methylheptan- $\gamma\zeta$ -Oxyd- $\eta$ -Quecksilberjodid. Sm. 44° (A. 329, 175 C. 1903 [2] 1413).
- $C_8H_{15}O_2NCl_2$  2)  $\beta\beta'$ -Dichlorisopropylester d. Diäthylamidoameisensäure. Sd. 259 bis 261° (Bl. [3] 31, 690 C. 1904 [2] 198).

- $C_8H_{16}ONBr$ . 1) Amid d.  $\delta$ -Bromheptan- $\delta$ -Carbonsäure. Sm. 55—56° (C. 1904 [2] 1666).  
 $C_8H_{16}N_2BrS$  1) 2-[d-sec. Butylamido]-5-Brommethyltetrahydrothiazol. Sm. 92 bis 93° (Ar. 242, 65 C. 1904 [1] 998).  
 $C_8H_{16}N_2JS$  1) 2-[d-sec. Butylamido]-5-Jodmethyltetrahydrothiazol. Sm. 114° (Ar. 242, 66 C. 1904 [1] 999).  
 $C_8H_{17}ON_4Cl$  1) Verbindung (aus Chlordimethyläther u. Hexamethylentetramin) (A. 334, 56 C. 1904 [2] 949).  
 $C_8H_{18}O_2NCl$  5)  $\delta$ -Trimethylchloramidovaleriansäure. 2 +  $PtCl_4$  (B. 37, 1856 C. 1904 [1] 1487).  
 $C_8H_{18}O_2NBr$  1)  $\delta$ -Trimethylbromamidovaleriansäure. Sm. 184—187° (B. 37, 1855 C. 1904 [1] 1487).  
 $C_8H_{18}NCl_2P$  \*1) Diisobutylamidodichlorphosphin. Sm. 37—38°; Sd. 116—117°<sub>20</sub> (A. 326, 156 C. 1903 [1] 761).  
 $C_8H_{18}NCl_4P$  1) Diisobutylamidophosphortetrachlorid. +  $PCl_5$  (A. 326, 160 C. 1903 [1] 761).  
 $C_8H_{19}O_2NCl$  1) Dipropylmonamid d. Aethylphosphorsäuremonoäthylester. Fl. (A. 326, 192 C. 1903 [1] 820).  
 $C_8H_{20}OCIP$  \*1)  $\beta$ -Oxytetraäthylphosphoniumchlorid. +  $HgCl_2$ , 2 +  $PtCl_4$ , +  $AuCl_3$  (Ar. 241, 409 C. 1903 [2] 986).  
 $C_8H_{20}O_3NP$  1) Diäthylmonamid d. Phosphorsäurediäthylester. Sd. 218—220° (A. 326, 182 C. 1903 [1] 819).  
 $C_8H_{22}ON_2Cl_2$  \*1) Di[Chlormethylat] d.  $\alpha\alpha'$ -Di[Dimethylamido]dimethyläther. +  $PtCl_4$  +  $H_2O$ , + 2  $AuCl_3$  (A. 334, 13 C. 1904 [2] 947).  
 $C_8H_{22}N_3SP$  1) Di[Aethylamid]-Isobutylamid d. Thiophosphorsäure. Sm. 48,5° (A. 326, 208 C. 1903 [1] 821).
- 8 V —
- $C_8H_9O_2NCl_2Br$  1) 4,6-Dichlor-5-Brom-3-Nitro-1,2-Dimethylbenzol. Sm. 175,5 bis 176,5° (Soc. 85, 275 C. 1904 [1] 1009).  
 $C_8H_9O_6NCIS$  \*1) 2-Chlorid d. 4-Nitrobenzol-1-Carbonsäuremethylester-2-Sulfonsäure. Sm. 135° (Am. 30, 388 C. 1904 [1] 275).  
 $C_8H_9ONClBr$  \*9) 4-Bromphenylamid d. Chloressigsäure. Sm. 179° (Ar. 241, 212 C. 1903 [2] 104).  
 14) 3-Bromphenylamid d. Chloressigsäure. Sm. 114° (Ar. 241, 211 C. 1903 [2] 104).  
 $C_8H_{10}ONCl_2P$  1) Diäthylphenylamid d. Phosphorsäuredichlorid. Sd. 159°<sub>10</sub> (A. 326, 255 C. 1903 [1] 869).  
 2) 2,4-Dimethylphenylmonamid d. Phosphorsäuredichlorid. Sm. 79° (A. 326, 240 C. 1903 [1] 868).  
 3) 2,5-Dimethylphenylmonamid d. Phosphorsäuredichlorid. Sm. 119° (A. 326, 240 C. 1903 [1] 868).  
 4) 3,4-Dimethylphenylmonamid d. Phosphorsäuredichlorid. Sm. 76° (A. 326, 240 C. 1903 [1] 868).  
 $C_8H_{10}O_3NSP$  1) Diäthylmonamid d. Thiophosphorsäurediäthylester. Sd. 110°<sub>20</sub> (A. 326, 211 C. 1903 [1] 822).  
 $C_8H_{10}O_3NBr_2P$  1) 2,4-Dibromphenylmonamid d. Phosphorsäuremonoäthylester. K (A. 326, 235 C. 1903 [1] 867).  
 $C_8H_{10}NCl_4SP$  1) Aethylphenylmonamid d. Thiophosphorsäuredichlorid. Fl. (A. 326, 257 C. 1903 [1] 869).  
 $C_8H_{11}ON_2ClS$  1) 2-Methyläther-4-Aethyläther d. 6-Chlor-2-Merkapto-4-Oxy-5-Methyl-1,3-Diazin. Sm. 85° (Am. 32, 354 C. 1904 [2] 1415).  
 $C_8H_{14}ONJ_8Hg_2$  1)  $\alpha$ -Verbindung (aus Methylheptenonoxim). Sm. 94°. Pikrat (A. 329, 184 C. 1903 [2] 1413).  
 2)  $\beta$ -Verbindung (aus Methylheptenonoxim). Sm. 123° u. Zers. (A. 329, 185 C. 1903 [2] 1413).  
 $C_8H_{18}ONCl_2P$  \*1) Diisobutylmonamid d. Phosphorsäuredichlorid. Sm. 54° (A. 326, 185 C. 1903 [1] 820).  
 $C_8H_{18}ONBr_2P$  1) Diisobutylmonamid d. Phosphorsäuredibromid. Sm. 68° (A. 326, 194 C. 1903 [1] 820).  
 $C_8H_{18}NCl_2SP$  \*1) Diisobutylmonamid d. Thiophosphorsäuredichlorid. Sm. 36°; Sd. 150°<sub>10</sub> (A. 326, 213 C. 1903 [1] 822).

- $C_8H_{18}NBr_2SP$  1) Diisobutylmonamid d. Thiophosphorsäuredibromid. Sm. 66° (A. 326, 216 C. 1903 [1] 822).
- $C_8H_{20}ON_2ClP$  1) Di[Isobutylamid] d. Phosphorsäuremonochlorid. Sm. 86° (A. 326, 176 C. 1903 [1] 819).
- $C_8H_{20}O_2NSP$  1) Isobutylmonamid d. Thiophosphorsäurediäthylester. Sd. 104°<sub>12</sub> (A. 326, 204 C. 1903 [1] 821).

C<sub>9</sub>-Gruppe.

- $C_9H_8$  \*1) Inden (B. 36, 640 C. 1903 [1] 717).
- \*4) Phenylallylen. Sd. 181—185° (C. r. 135, 1347 C. 1903 [1] 328).
- $C_9H_{10}$  \*2)  $\alpha$ -Phenylpropen. Sd. 174—175° (167—170°) (B. 36, 206 C. 1903 [1] 512; B. 36, 621 C. 1903 [1] 703; B. 36, 772 C. 1903 [1] 834; B. 36, 2572 C. 1903 [2] 495; B. 36, 3033 C. 1903 [2] 948; C. r. 139, 482 C. 1904 [2] 1038).
- \*3)  $\gamma$ -Methylpropen. Sd. 156—157° (C. r. 139, 482 C. 1904 [2] 1038).
- \*5) 4-Methylphenyläthen. Sd. 63°<sub>15</sub> (B. 36, 1636 C. 1903 [2] 26).
- $C_9H_{12}$  \*1) Propylbenzol. Sd. 157,5°<sub>735</sub> (B. 36, 622 C. 1903 [1] 703).
- \*5) 1-Methyl-4-Aethylbenzol. Sd. 162,5°<sub>780</sub> (B. 36, 1637 C. 1903 [2] 26; B. 36, 1874 C. 1903 [2] 286).
- $C_9H_{14}$  12) 4-Methyl-1-Isopropyl-2,3-Dihydro-R-Penten (Anhydrocamphorylalkohol). Sd. 144—146° (B. 37, 237 C. 1904 [1] 726).
- 13) Kohlenwasserstoff (aus Pinonsäure). Fl. (B. 37, 239 C. 1904 [1] 726).
- $C_9H_{16}$  \*12)  $\alpha$ -Cyklogeraniolen. Sd. 138—142°<sub>735</sub> (B. 37, 848 C. 1904 [1] 1145).
- \*16) 4-Isopropyl-1-Methyl-2,3-Dihydro-R-Penten (Pulegen). Sd. 138—139° (A. 327, 131, 151 C. 1903 [1] 1412; A. 329, 108 C. 1903 [2] 1071).
- \*17) Pulenen. Sd. 60—65°<sub>12</sub> (A. 329, 88 C. 1903 [2] 1071).
- 19)  $\beta\zeta$ -Dimethyl- $\beta\epsilon$ -Heptadien. Sd. 140—142° (B. 37, 846 C. 1904 [1] 1145).
- 20) 3-Methylen-1,1,2-Trimethyl-R-Pentamethylen. Sd. 138—140° (C. r. 136, 1461 C. 1903 [2] 287).
- 21) Oktahydroinden. Sd. 163—164° (C. 1903 [2] 989).
- 22) Kohlenwasserstoff (aus 1-Oxy-1-Propylhexahydrobenzol). Sd. 154°<sub>780</sub> (C. r. 138, 1323 C. 1904 [2] 219).
- 23) Kohlenwasserstoff (aus  $\alpha$ -Oxyisopropylhexahydrobenzol). Sd. 151° (C. r. 139, 345 C. 1904 [2] 704).
- $C_9H_{18}$  \*25)  $\beta$ -Nonen. Sd. 147—148° (B. 36, 2550 C. 1903 [2] 654).
- 28) Aethyl-R-Heptamethylen. Sd. 163—163,5°<sub>740</sub> (C. 1903 [1] 568; A. 327, 72 C. 1903 [1] 1124).

## — 9 II —

- $C_9H_8N$  C 85,0 — H 3,9 — N 11,0 — M. G. 127.
- 1) Nitril d.  $\alpha$ -Phenyläthin- $\beta$ -Carbonsäure (N. d. Phenylpropionsäure). Sm. 38—40° (B. 36, 3671 C. 1903 [2] 1313).
- $C_9H_8O$  \*3) Aldehyd d. Phenyläthin- $\alpha$ -Carbonsäure (C. r. 137, 125 C. 1903 [2] 569; B. 36, 4670 C. 1903 [2] 1313).
- $C_9H_8O_2$  \*4) Isocumarin. Sm. 46° (B. 36, 573 C. 1903 [1] 710).
- \*6) Phenylpropionsäure (Soc. 83, 1154 C. 1903 [2] 1369).
- $C_9H_8O_3$  16) 4-Oxy-1,2-Benzpyron. Sm. 206° (B. 36, 464 C. 1903 [1] 636).
- 17) Verbindung (aus Isobrenzschleimsäure). Sm. 155—160° (C. r. 137, 923 C. 1904 [1] 291).
- $C_9H_8O_4$  \*4) Daphnetin. K, + Kaliumacetat (Soc. 83, 134 C. 1903 [1] 89, 466).
- \*6) Phtalidcarbonsäure. Sm. 153° (A. 334, 357 C. 1904 [2] 1054).
- 13) 7,8-Dioxy-1,4-Benzpyron + 2H<sub>2</sub>O. Sm. 262° (wasserfrei) (B. 36, 128 C. 1903 [1] 468).
- 14) 1,2-Lakton d. 1-Oxymethylbenzol-2,5-Dicarbonsäure. Sm. 283 bis 284° (B. 36, 843 C. 1903 [1] 971).
- $C_9H_8O_5$  \*2) Benzol-1-Carbonsäure-2-Ketocarbonsäure. Sm. 145°. K (M. 24, 933 C. 1904 [1] 515; A. 334, 359 C. 1904 [2] 1055).
- $C_9H_8O_6$  \*3) Benzol-1,3,5-Tricarbonsäure. Sm. 380° (B. 36, 1799 C. 1903 [2] 283).
- $C_9H_8N_2$  6) Nitril d. Phenylmalonsäure. Sm. 68—69°; Sd. 152—153°<sub>11</sub>. Na, Ag (Am. 32, 123 C. 1904 [2] 953).

- $C_9H_5Cl_2$  3)  $\gamma\gamma$ -Dichlor- $\alpha$ -Phenylpropin. Sd. 131—132°<sub>22</sub> (*C. r.* 137, 127 *C.* 1903 [2] 569).
- $C_9H_5Cl_4$  1)  $\alpha\beta\gamma\gamma$ -Tetrachlor- $\alpha$ -Phenylpropen. Sd. 165—167°<sub>28</sub> (*C. r.* 137, 127 *C.* 1903 [2] 570).
- $C_9H_7Cl_3$  2)  $\beta\gamma\gamma$ -Trichlor- $\alpha$ -Phenylpropen. Sm. 47°; Sd. 155°<sub>30</sub> (*C. r.* 136, 1074 *C.* 1903 [1] 1345).
- $C_9H_5O$  \*1) Methyläther d. 4-Oxyphenyläthin. Sd. 85—88°<sub>11</sub> (*B.* 36, 915 *C.* 1903 [1] 970).
- \*7) 2-Keto-2,3-Dihydroinden. Sm. 58° (*A.* 336, 3 *C.* 1904 [2] 1465).
- \*9)  $\gamma$ -Keto- $\gamma$ -Phenylpropen (Vinylphenylketon). Fl. (*B.* 36, 1355 *C.* 1903 [1] 1299).
- \*10) Aldehyd d.  $\beta$ -Phenylakrylsäure. +  $SbCl_5$ , 2 +  $SnCl_4$ , 2 +  $SnBr_4$ , 4 +  $ThCl_4$  (*B.* 37, 3666 *C.* 1904 [2] 1569).
- 16) polym.  $\gamma$ -Keto- $\gamma$ -Phenylpropen (polym. Vinylphenylketon) (*B.* 36, 1355 *C.* 1903 [1] 1299).
- $C_9H_5O_2$  \*7) Zimmtsäure. 3 +  $SbCl_5$ , +  $FeCl_3$ , 2 +  $SnCl_4$  (*B.* 35, 4128 *C.* 1903 [1] 160; *C. r.* 136, 1332 *C.* 1903 [2] 107; *B.* 36, 4266 *C.* 1904 [1] 373; *B.* 37, 3668 *C.* 1904 [2] 1569).
- \*8) Isozimmtsäure (*B.* 36, 176 *C.* 1903 [1] 582; *B.* 36, 903 *C.* 1903 [1] 1133; *B.* 36, 2497 *C.* 1903 [2] 721).
- \*9) Allozimmtsäure.  $Ca + 2H_2O$ ,  $Ba + H_2O$  (*B.* 36, 182 *C.* 1903 [1] 582; *B.* 36, 904 *C.* 1903 [1] 1133; *C.* 1904 [2] 439).
- \*10) isom.  $\beta$ -Phenylakrylsäure. Sm. 37° (*B.* 34, 3640; *B.* 37, 3361 *C.* 1904 [2] 1123).
- \*12) Homococassäure (Protococassäure) (*J. pr.* [2] 66, 421 *C.* 1903 [1] 528).
- \*13) Homoisococassäure (Protoisococassäure) (*J. pr.* [2] 66, 421 *C.* 1903 [1] 528).
- \*27) isom. Isozimmtsäure (*B.* 36, 1448 *C.* 1903 [1] 1409).
- 28) Methylenäther d. 3,4-Dioxyphenyläthen. Sd. 107—108°<sub>15</sub> (223—225°) (*B.* 36, 3596 *C.* 1903 [2] 1366; *G.* 34 [1] 365 *C.* 1904 [2] 214; *G.* 34 [2] 176 *C.* 1904 [2] 648, 982).
- 29) Methylenäther d. polym. 3,4-Dioxyphenyläthen. Zers. bei 210° (*G.* 34 [1] 370 *C.* 1904 [2] 214).
- 30) 4-Oxymethylbenzofuran. Sm. 26—27°; Sd. 147—150°<sub>12</sub> (*B.* 37, 200 *C.* 1904 [1] 661).
- $C_9H_5O_3$  \*1) 3,4-Methylenäther d. Methyl-3,4-Dioxyphenylketon. Sm. 87° (*G.* 34 [1] 364 *C.* 1904 [2] 214).
- \*3)  $\beta$ -[2-Oxyphenyl]akrylsäure (*B.* 37, 346 *C.* 1904 [1] 662).
- \*4)  $\beta$ -[3-Oxyphenyl]akrylsäure. Sm. 188—189° (*B.* 37, 4127 *C.* 1904 [2] 1735).
- \*12)  $\beta$ -Phenyl- $\alpha$ -Ketoäthan- $\alpha$ -Carbonsäure (*A.* 333, 228 *C.* 1904 [2] 1389).
- \*24) Laktone d. 1-Dioxymethylbenzylmethyläther-2-Carbonsäure. Sm. 44°; Sd. 242—245° (*M.* 25, 497 *C.* 1904 [2] 325).
- 31) Formalphenyloxyessigsäure. Sm. 20°; Sd. 223° (*R.* 21, 316 *C.* 1903 [1] 137).
- 32) Methylster d. Benzol-1-Carbonsäure-2-Carbonsäurealdehyd. Sd. 220—222° (*M.* 25, 496 *C.* 1904 [2] 325).
- 33) 4-Aethyl-1,2-Phenyleneester d. Kohlensäure. Sd. 135—137°<sub>12</sub> (*C. r.* 138, 1702 *C.* 1904 [2] 436).
- $C_9H_5O_4$  \*7) 3,4-Dioxyphenyllessigmethylenäthersäure. Sm. 128° (*A.* 332, 333 *C.* 1904 [2] 652).
- \*18) Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 175° (*M.* 24, 936 *C.* 1904 [1] 515).
- \*19) Benzol-1-Carbonsäure-3-Methylcarbonsäure. Sm. 184—185° (*B.* 36, 3611 *C.* 1903 [2] 1372).
- \*43) Monomethylester d. Benzol-1,4-Dicarbonsäure (*B.* 37, 3222 *C.* 1904 [2] 1121).
- 49) Areolatol +  $H_2O$ . subl. bei 220° (*J. pr.* [2] 68, 60 *C.* 1903 [2] 513).
- 50) Gemischtes Peroxyd d. Essigsäure u. Benzolcarbonsäure. Sd. 128—130°<sub>10</sub> (*Am.* 29, 197 *C.* 1903 [1] 959).
- 51) Mono[4-Methylphenylester] d. Oxalsäure. Sm. 185—186° u. Zers. (*D.R.P.* 137584 *C.* 1903 [1] 112).
- $C_9H_5O_5$  \*19)  $\alpha$ -Oxy- $\alpha$ -Phenylmethan- $\alpha$ ,2-Dicarbonsäure.  $Ba + H_2O$  (*A.* 334, 358 *C.* 1904 [2] 1055).

- $C_9H_8O_5$  \*21) 4-Oxybenzolzomethyläther-1,2-Dicarbonsäure. Sm. 167° (*C.* 1904 [1] 1597).  
 \*24) 2-Oxybenzolzomethyläther-1,4-Dicarbonsäure. Sm. 281° (*C.* 1904 [1] 1597).  
 35) 1-Aldehyd d. 4,5-Dioxybenzol-5-Methyläther-1,3-Dicarbonsäure (D.R.P. 71162). — \*II, 1122.  
 36) Aldehydd. 3-Oxybenzol-1-Carbonsäure-4-Kohlensäuremethylester. Sm. 98—99° (D.R.P. 93187). — \*III, 76.  
 37) 6-Acetat d. 2,6-Dioxy-1,4-Benzochinon-2-Methyläther. Zers. bei 275—278° (*M.* 23, 956 *C.* 1903 [1] 236).
- $C_9H_8O_6$  6) 4-Oxyphenyltartronsäure. Sm. 118—120° u. Zers.  $K_2$  (D.R.P. 115817 *C.* 1901 [1] 72). — \*II, 1164.  
 7) Dimethylester d. 1,4-Pyron-2,6-Dicarbonsäure. Sm. 122,5° (*B.* 37, 3751 *C.* 1904 [2] 1539).
- $C_9H_8O_7$  3) 3,4-Dioxyphenyltartronsäure. Fl. Ba +  $H_2O$  (D.R.P. 115817 *C.* 1901 [1] 72). — \*II, 1194.
- $C_9H_8N_2$  \*3) 4-Phenylpyrazol. Sm. 228° (*B.* 36, 3778 *C.* 1904 [1] 41).  
 \*7) 1-[3-Pyridyl]pyrrol. Sd. 251° (*C. r.* 137, 861 *C.* 1904 [1] 104).  
 \*8) 2-[3-Pyridyl]pyrrol. Sm. 72° (*C. r.* 137, 861 *C.* 1904 [1] 104).  
 \*16) 2-Methyl-1,3-Benzodiazin. Sm. 41—42; Sd. 247,5—248°<sub>87,5</sub> (*B.* 36, 810 *C.* 1903 [1] 1978).  
 21) 5-Phenylimidazol. Sm. 128—129°. (2HCl,  $PtCl_4$  + 3  $H_2O$ ) (*B.* 35, 4135 *C.* 1903 [1] 294).  
 22) Nitril d.  $\beta$ -Phenylimidopropionsäure? Sm. 124° (*B.* 36, 3666 *C.* 1903 [2] 1312).
- $C_9H_8Cl_2$  2)  $\gamma\gamma$ -Dichlor- $\alpha$ -Phenylpropen. Sm. 54°; Sd. 142—143°<sub>30</sub> (*C. r.* 136, 94 *C.* 1903 [1] 457).
- $C_9H_8Cl_4$  1)  $\alpha\beta\gamma\gamma$ -Tetrachlor- $\alpha$ -Phenylpropan. Sm. 66° (*C. r.* 136, 95 *C.* 1903 [1] 457).
- $C_9H_8Br_4$  4) 2,3,5,6-Tetrabrom-4-Aethyl-1-Methylbenzol (*B.* 36, 1637 *C.* 1903 [2] 26).
- $C_9H_9N$  \*17) Nitril d. 1,2-Dimethylbenzol-4-Carbonsäure. Sm. 66° (*B.* 36, 328 *C.* 1903 [1] 576).  
 \*18) Nitril d. 1,3-Dimethylbenzol-2-Carbonsäure. Sm. 90—91° (*B.* 36, 327 *C.* 1903 [1] 576).  
 \*19) Nitril d. 1,3-Dimethylbenzol-4-Carbonsäure. Sm. 24°; Sd. 223 bis 224° (*B.* 36, 327 *C.* 1903 [1] 576; *G.* 32 [2] 491 *C.* 1903 [1] 832).  
 20) Nitril d. 1,2-Dimethylbenzol-3-Carbonsäure. Sd. 230—240° (*B.* 36, 329 *C.* 1903 [1] 576).  
 21) Nitril d. 1,4-Dimethylbenzol-2-Carbonsäure. Sm. 5,5° (13—14°) (*B.* 36, 330 *C.* 1903 [1] 576; *G.* 32 [2] 484 *C.* 1903 [1] 831).
- $C_9H_9N_3$  \*17) 5-Methyl-1-Phenyl-1,2,3-Triazol. HCl (*B.* 35, 4048 *C.* 1903 [1] 169).
- $C_9H_8Cl$  3)  $\alpha$ -Chlor- $\alpha$ -[4-Methylphenyl]äthen. Sd. 96—97,5°<sub>13</sub> (*B.* 36, 1876 *C.* 1903 [2] 286).  
 4)  $\beta$ -Chlor- $\alpha$ -[4-Methylphenyl]äthen. Sm. 36—37°; Sd. 222—224°<sub>700</sub> (*B.* 36, 3908 *C.* 1903 [2] 1438).
- $C_9H_8Br$  \*4)  $\alpha$ -Brom- $\beta$ -Phenylpropen. Sd. 225—228° (*C. r.* 135, 1346 *C.* 1903 [1] 328).  
 5)  $\beta$ -Brom- $\alpha$ -Phenylpropen. Sd. 109—110°<sub>20</sub> (*B.* 36, 207 *C.* 1903 [1] 512).  
 6)  $\beta$ -Brom- $\alpha$ -[4-Methylphenyl]äthen. Sm. 46,5—47,5° (*B.* 36, 3908 *C.* 1903 [2] 1439).
- $C_9H_{10}O$  \*6) Methyläther d. 2-Oxyphenyläthen. Sd. 82—83°<sub>11</sub> (*B.* 36, 3590 *C.* 1903 [2] 1365).  
 \*7) Methyläther d. 4-Oxyphenyläthen. Sd. 204—205°<sub>758</sub> (*B.* 36, 3592 *C.* 1903 [2] 1366).  
 \*11)  $\beta$ -Keto- $\alpha$ -Phenylpropan. Sd. 210—212° (*A.* 325, 146 *C.* 1903 [1] 644).  
 \*12) Aethylphenylketon (*C. r.* 137, 576 *C.* 1903 [2] 1110; *C.* 1904 [1] 1259).  
 \*14) Methyl-4-Methylphenylketon (*C. r.* 136, 558 *C.* 1903 [1] 832).  
 \*15) Aldehyd d.  $\alpha$ -Phenylpropionsäure. Sd. 204° (*C. r.* 137, 1261 *C.* 1904 [1] 445).  
 \*18) Aldehyd d. 1,3-Dimethylbenzol-4-Carbonsäure. Sd. 219—229° (*C.* 1901 [2] 772; *G.* 32 [1] 486 *C.* 1903 [1] 831; *Soz.* 85, 217 *C.* 1904 [1] 656, 939).  
 \*20) Aldehyd d. 1,4-Dimethylbenzol-2-Carbonsäure. Sd. 100°<sub>10</sub> (*G.* 32 [2] 477 *C.* 1903 [1] 830).

- $C_9H_{10}O$
- 26) Methyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. *Sd.* 197° (*C. r.* 137, 261 *C. 1903* [2] 664; *C. r.* 138, 287 *C. 1904* [1] 719; *Bl.* [3] 31, 525 *C. 1904* [1] 1552).
- 27) Methyläther d.  $\beta$ -Oxy- $\alpha$ -Phenyläthen. *Sd.* 210—213° (*C. r.* 138, 288 *C. 1904* [1] 720; *Bl.* [3] 31, 527 *C. 1904* [1] 1552).
- 28) Methyläther d. 3-Oxyphenyläthen. *Sd.* 89—90<sub>14</sub>° (*B.* 36, 3592 *C. 1903* [2] 1366).
- 29) 4-Methyl-1,2-Dihydrobenzofuran. *Sd.* 210—211° (*B.* 36, 2877 *C. 1903* [2] 834).
- 30) Aldehyd d. 1-Aethylbenzol-4-Carbonsäure. *Sd.* 221° (*C. r.* 136, 558 *C. 1903* [1] 832).
- $C_9H_{10}O_2$
- \*7) Methyl-4-Oxy-2-Methylphenylketon. *Sm.* 128°; *Sd.* 313° (*C. 1904* [1] 1597).
- \*9) Methyläther d. Methyl-2-Oxyphenylketon. *Sd.* 239<sub>757</sub>° (*B.* 36, 3589 *C. 1903* [2] 1365).
- \*10) Methyläther d. Methyl-3-Oxyphenylketon. *Sd.* 238—240<sub>756</sub>° (*B.* 36, 3591 *C. 1903* [2] 1366).
- \*17)  $\beta$ -Phenylpropionsäure. *Sm.* 48°. *Ca, Ba* (*B.* 35, 905 *C. 1903* [1] 1133; *C. r.* 138, 1049 *C. 1904* [1] 1493; *C. 1904* [2] 1697).
- \*20) 4-Methylphenylelessigsäure. *Sm.* 91° (*B.* 36, 3515 *C. 1903* [2] 1275).
- \*23) 1-Aethylbenzol-4-Carbonsäure. *Sm.* 112° (*B.* 36, 3906 *C. 1903* [2] 1438).
- \*25) 1,2-Dimethylbenzol-4-Carbonsäure. +  $H_2SO_4$  (*R.* 21, 351 *C. 1903* [1] 150).
- \*27) 1,3-Dimethylbenzol-4-Carbonsäure. +  $1\frac{1}{2}H_2SO_4$  (*R.* 21, 351 *C. 1903* [1] 150).
- \*28) 1,3-Dimethylbenzol-5-Carbonsäure. +  $H_2SO_4$  (*R.* 21, 351 *C. 1903* [1] 150).
- \*29) 1,4-Dimethylbenzol-2-Carbonsäure. +  $H_2SO_4$  (*R.* 21, 351 *C. 1903* [1] 150).
- \*43) Äthylester d. Benzolcarbonsäure. +  $AlCl_3$  (*B.* 36, 3087 *C. 1903* [2] 1004; *Soc.* 85, 1107 *C. 1904* [2] 976).
- \*53) Äthyl-2-Oxyphenylketon. *Sd.* 115<sub>15</sub>° (*B.* 36, 2586 *C. 1903* [2] 621).
- 56) Methylenäther d. 3,4-Dioxy-1-Aethylbenzol. *Sd.* 212—213<sub>759</sub>° (*B.* 36, 3596 *C. 1903* [2] 1367).
- 57)  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha$ -Phenylpropan. *Sd.* 135<sub>40</sub>° (*G.* 33 [2] 263 *C. 1904* [1] 24).
- 58)  $\beta$ -Oxyäthylphenylketon. *Sm.* 190° (*B.* 36, 1356 *C. 1903* [1] 1299).
- 59) Methyl-2-Oxy-4-Methylphenylketon. *Sm.* 21°; *Sd.* 245<sub>780</sub>° (*C. 1904* [1] 1597).
- 60) 3-Methylcykloheptatriäncarbonsäure. *Sm.* 107—108°. *Ag* (*B.* 36, 3516 *C. 1903* [2] 1275).
- 61) 3-Methylnorcaradiäncarbonsäure. *Fl.* (*B.* 36, 3515 *C. 1903* [2] 1275).
- 62) Aldehyd d. 4-Oxy-1,3-Dimethylbenzol-5-Carbonsäure. *Sm.* 11°; *Sd.* 222° (*B.* 35, 4108 *C. 1903* [1] 150).
- 63) Aldehyd d. 3-Oxy-1,4-Dimethylbenzol-2-Carbonsäure. *Sm.* 62—63° (*B.* 35, 4108 *C. 1903* [1] 150).
- 64) Aldehyd d. 4-Oxyphenylelessigmethyläthersäure. *Sd.* 255—256° (*C. r.* 134, 1505). — \*III, 66.
- 65) Aldehyd d. 5-Oxy-1-Methylbenzolzomethyläther-2-Carbonsäure. *Sd.* 257° (*B.* 31, 1151). — \*III, 64.
- 66) Aldehyd d. 6-Oxy-1-Methylbenzolzomethyläther-3-Carbonsäure. *Sd.* 251° (*B.* 31, 1151). — \*III, 65.
- $C_9H_{10}O_3$
- \*8)  $\alpha$ -Oxy- $\alpha$ -Phenylpropionsäure +  $\frac{1}{2}H_2O$ . *Sm.* 94° (89—90°) (*B.* 36, 1406 *C. 1903* [1] 1347; *B.* 36, 4315 *C. 1904* [1] 449).
- \*12)  $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. *Sm.* 96° (*B.* 36, 4313 *C. 1904* [1] 449).
- \*27) 4-Methoxyphenylelessigsäure. *Sm.* 86°. *Ag* (*A.* 332, 326 *C. 1904* [2] 651).
- \*41) 5-Oxy-1-Methylbenzolzomethyläther-2-Carbonsäure. *Sm.* 176° (*C. 1904* [1] 1597).
- \*47) 3-Oxy-1-Methylbenzolzomethyläther-4-Carbonsäure. *Sm.* 104° (*C. 1904* [1] 1597).
- \*50) 4-Oxybenzolzomethyläther-1-Carbonsäure (*C. r.* 136, 378 *C. 1903* [1] 636).

- $C_9H_{10}O_3$  \*60) Aldehyd d. 3,4-Dioxybenzoldimethyläther-1-Carbonsäure (B. 37, 3402 C. 1904 [2] 1318).
- \*62) Methylester d.  $\alpha$ -Oxyphenylessigsäure. Sm. 58°; Sd. 144°<sub>20</sub>. + 4 AlCl<sub>3</sub> (B. 37, 2767 C. 1904 [2] 708; Soc. 85, 1107 C. 1904 [2] 976).
- \*88)  $\alpha$ -[4-Oxyphenyl]propionsäure. Sm. 130° (A. 227, 268; C. r. 131, 270). — \*II, 930.
- 93) 3,4-Methylenäther d. 3,4-Dioxy-1-[ $\alpha$ -Oxyäthyl]benzol. Sd. 137 bis 138°<sub>14</sub> (268—270°) (B. 36, 3595 C. 1903 [2] 1366; G. 34 [1] 361 C. 1904 [2] 214).
- 94) 5-Methyläther d. Methyl-2,5-Dioxyphenylketon. Sm. 52° (B. 37, 774 Ann. C. 1904 [1] 1155).
- 95) 1- $\alpha$ -Oxy- $\alpha$ -Phenylpropionsäure. Sm. 90—91,5° (Soc. 85, 1260 C. 1904 [2] 1304).
- 96) Aldehyd d. 4,5-Dioxy-1-Methylbenzol-4-Methyläther-2-Carbonsäure. Sm. 165° (D.R.P. 91170). — \*III, 77.
- 97) Aldehyd d. 3,4-Dioxybenzol-3-Aethyläther-1-Carbonsäure. Sm. 77,5° (D.R.P. 81071, 81352, 85196, 90395). — \*III, 74.
- 98) Methylester d. 1- $\alpha$ -Oxyphenylessigsäure (C. r. 124, 196). — \*II, 925.
- $C_9H_{10}O_4$  \*11)  $\alpha$ -Oxy- $\alpha$ -[4-Methoxyphenyl]essigsäure. Sm. 108—109° (B. 37, 3174 C. 1904 [2] 1303).
- \*18) 2,4-Dioxybenzoldimethyläther-1-Carbonsäure. Sm. 108° (M. 24, 890 C. 1904 [1] 512).
- \*21) 3,4-Dioxybenzoldimethyläther-1-Carbonsäure + 2H<sub>2</sub>O. Sm. 179 bis 180° (Soc. 83, 621 C. 1903 [1] 591; B. 37, 2152 C. 1904 [2] 207).
- \*22) 3,5-Dioxybenzoldimethyläther-1-Carbonsäure. Sm. 180—181° (180°) (B. 35, 3901 C. 1903 [1] 27; B. 36, 2303 C. 1903 [2] 578).
- \*34) Aldehyd d. 3,4,5-Trioxymethyläther-3,5-Dimethyläther-1-Carbonsäure. Sm. 113° (B. 36, 1032 C. 1903 [1] 1223).
- \*35) Methylester d. 3,5-Dioxy-1-Methylbenzol-2-Carbonsäure. Sm. 140° (M. 24, 898 C. 1904 [1] 512).
- \*55) Methoxymethylester d. 2-Oxybenzol-1-Carbonsäure (Mesotan). Sd. 153°<sub>9</sub> (C. 1903 [1] 1155; D.R.P. 137585 C. 1903 [1] 112).
- 57) Aethyl-2,3,4-Trioxymethyläther-1-Carbonsäure. Sm. 127° (D.R.P. 42149, 50451). — \*III, 115.
- 58) Monomethyläther d. Methyl-2,3,4-Trioxymethyläther + H<sub>2</sub>O. Sm. 132—133° (wasserfrei) (Soc. 83, 131 C. 1903 [1] 89, 466).
- 59) d- $\alpha$ -Dioxy- $\beta$ -Phenylpropionsäure. Sm. 166—167°. Zn + 6H<sub>2</sub>O (B. 30, 1608). — \*II, 1034.
- 60) l- $\alpha$ -Dioxy- $\beta$ -Phenylpropionsäure. Sm. 166—167°. Zn + 2H<sub>2</sub>O (B. 30, 1608). — \*II, 1034.
- 61) d- $\alpha$ -Oxy- $\alpha$ -[4-Methoxyphenyl]essigsäure. Sm. 104—105°. Cinchoninsalz (B. 37, 3175 C. 1904 [2] 1304).
- 62) l- $\alpha$ -Oxy- $\alpha$ -[4-Methoxyphenyl]essigsäure. Sm. 104—105°. Cinchoninsalz (B. 37, 3175 C. 1904 [2] 1304).
- 63) 3,5-Dioxy-1-Methylbenzol- $\beta$ -Methyläther-2-Carbonsäure. Sm. 169 bis 170° (M. 24, 897 C. 1904 [1] 512).
- 64) 3,5-Dioxy-1-Methylbenzol-3-Methyläther-4-Carbonsäure. Sm. 145 bis 146° (M. 24, 900 C. 1904 [1] 513).
- 65) Anhydrid d.  $\beta$ -Hepten- $\gamma$ - $\zeta$ -Oxyd- $\alpha$ - $\beta$ -Dicarbonsäure. Sm. 182° (A. 331, 193 C. 1904 [1] 1213).
- 66) Aldehyd d. 2,4,6-Trioxymethyläther-1,3-Dimethylbenzol-5-Carbonsäure. Zers. bei 190° (M. 24, 878 C. 1904 [1] 369).
- 67) Aldehyd d. 2,4,6-Trioxymethyläther-2,4-Dimethyläther-1-Carbonsäure. Sm. 70—71° (M. 24, 861 C. 1904 [1] 367).
- 68) Methylester d. 3,5-Dioxy-1-Methylbenzol-2-Carbonsäure. Sm. 98 bis 99° (M. 24, 895 C. 1904 [1] 512).
- 69) Methylester d. 2,6-Dioxy-1-Methylbenzol-3-Carbonsäure. Sm. 126 bis 128° (130—132°) (M. 24, 117 C. 1903 [1] 967; M. 24, 909 C. 1904 [1] 513).
- 70) Methylester d. 2,4-Dioxybenzol-4-Methyläther-1-Carbonsäure. Sm. 48—50° (M. 24, 887 C. 1904 [1] 512).
- $C_9H_{10}O_5$  \*3) 3,4,5-Trioxymethyläther-3,5-Dimethyläther-1-Carbonsäure (Syringensäure). Sm. 202° (B. 36, 216 C. 1903 [1] 455).
- \*25) Methylester d. 3,4,5-Trioxymethyläther-4-Methyläther-1-Carbonsäure. Sm. 147,5° (B. 36, 216 C. 1903 [1] 455).

- $C_9H_{10}O_5$  26) 2,3,4-Trioxybenzol-3,4-Dimethyläther-1-Carbonsäure. Sm. 169 bis 172° (*B.* 36, 661 *C.* 1903 [1] 710; *M.* 25, 513, 518 *C.* 1904 [2] 1118).  
 27) Dimethylester d.  $\gamma$ -Keto- $\alpha\delta$ -Pentadien- $\alpha\epsilon$ -Dicarbonsäure. Sm. 169 bis 169,5° (*B.* 37, 3295 *C.* 1904 [2] 1041).  
 28) 1-Aethylcarbonat d. 1,2,3-Trioxybenzol. Sm. 74° (*B.* 37, 108 *C.* 1904 [1] 584).  
 29) Verbindung (aus  $\gamma$ -Keto- $\alpha\delta$ -Pentadien- $\alpha\epsilon$ -Dicarbonsäuredimethylester). Sm. 240–241° u. Zers. (*B.* 37, 3296 *C.* 1904 [2] 1041).
- $C_9H_{10}O_{10}$  2) Butan- $\alpha\alpha\beta\beta\delta$ -Pentacarbonsäure. Fl.  $Ag_5$  (*Soc.* 85, 612 *C.* 1904 [1] 1254, 1553).
- $C_9H_{10}N_2$  \*4) 4-Phenyl-4,5-Dihydropyrazol. Fl. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Oxalat (*B.* 36, 3777 *C.* 1904 [1] 41).  
 \*18) 2-Methyl-3,4-Dihydro-1,3-Benzdiazin. Pikrat (*B.* 36, 813 *C.* 1903 [1] 979).  
 \*21) Nitril d.  $\alpha$ -Phenylamidopropionsäure. Sm. 92° (D.R.P. 142559 *C.* 1903 [2] 81).  
 \*24) Nitril d. 4-Methylphenylamidoessigsäure. Sm. 61° (57°) (D.R.P. 138098 *C.* 1903 [1] 208; D.R.P. 142559 *C.* 1903 [2] 81; *B.* 37, 4082 *C.* 1904 [2] 1723).  
 \*28) Nitril d. 4-Dimethylamidobenzol-1-Carbonsäure. Sm. 76°; Sd. 318°<sub>788</sub> (*B.* 37, 1789 *C.* 1904 [1] 1599).  
 \*30) Nitril d. 2-Methylphenylamidoessigsäure (D.R.P. 138098 *C.* 1903 [1] 208).  
 34)  $\alpha\beta$ -Benzylidenhydrazonäthan. Sm. 208° (*J. pr.* [2] 67, 144 *C.* 1903 [1] 865).  
 35) 3-Methyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 91–92°; Sd. 309°<sub>788</sub>. Pikrat (*B.* 37, 3646 *C.* 1904 [2] 1513).  
 36) Nitril d. Methylphenylamidoessigsäure. Sm. 13°; Sd. 266° (*B.* 37, 2636 *C.* 1904 [2] 518; *B.* 37, 2825 *C.* 1904 [2] 702; *B.* 37, 4083 *C.* 1904 [2] 1723).
- $C_9H_{10}N_4$  13) 1-Phenylamido-5-Methyl-1,2,3-Triazol (*A.* 325, 158 *C.* 1903 [1] 644).  
 $C_9H_{10}Cl_2$  5) Dichlortrimethylbenzol. Sm. 77° (*Soc.* 79, 144 *C.* 1904 [1] 88).  
 6) Verbindung (aus 4-Oxy-1-Dichlormethyl-1,4-Dimethyl-1,4-Dihydrobenzol). Sd. 118–123°<sub>11</sub> (*B.* 36, 1871 *C.* 1903 [2] 286).
- $C_9H_{10}Br_2$  \*2)  $\alpha\beta$ -norm. Dibrompropylbenzol. Sm. 70° (*C. r.* 139, 482 *C.* 1904 [2] 1038).  
 \*5) 4- $[\alpha\beta$ -Dibromäthyl]-1-Methylbenzol. Sm. 45° (*B.* 36, 1637 *C.* 1903 [2] 26).
- $C_9H_{11}N$  \*11)  $\alpha$ -2-Methyl-2,3-Dihydroindol. Sd. 225–226° (*Soc.* 85, 1331 *C.* 1904 [2] 1657).  
 21)  $\alpha$ -d-1-Amido-2,3-Dihydroinden. d-Bromcamphersulfonat, d-Chlorcamphersulfonat (*Soc.* 83, 878 *C.* 1903 [2] 504; *Soc.* 83, 908 *C.* 1903 [2] 504).  
 22)  $\beta$ -d-1-Amido-2,3-Dihydroinden. d-Bromcamphersulfonat, d-Chlorcamphersulfonat (*Soc.* 83, 890 *C.* 1903 [2] 504; *Soc.* 83, 912 *C.* 1903 [2] 504).  
 23)  $\alpha$ -l-1-Amido-2,3-Dihydroinden. d-Bromcamphersulfonat, d-Chlorcamphersulfonat (*Soc.* 83, 879 *C.* 1903 [2] 504; *Soc.* 83, 912 *C.* 1903 [2] 504).  
 24)  $\beta$ -l-1-Amido-2,3-Dihydroinden. d-Bromcamphersulfonat, d-Chlorcamphersulfonat (*Soc.* 83, 890 *C.* 1903 [2] 504; *Soc.* 83, 912 *C.* 1903 [2] 504).  
 25) d-2-Methyl-2,3-Dihydroindol. Sd. 225°? (*Soc.* 85, 1334 *C.* 1904 [2] 1657).  
 26) l-2-Methyl-2,3-Dihydroindol. Sd. 228–229°. HCl, d-Bromcamphersulfonat (*Soc.* 85, 1331 *C.* 1904 [2] 1657).
- $C_9H_{11}Br$  14)  $\gamma$ -Brom- $\alpha$ -Phenylpropan. Sd. 110°<sub>12</sub> (*C. r.* 138, 1049 *C.* 1904 [1] 1493).  
 $C_9H_{11}J$  \*1) 4-Jod-1-Propylbenzol. Sd. 240–242° (*A.* 327, 303 *C.* 1903 [2] 353).  
 7) 4-Jod-3-Aethyl-1-Methylbenzol. Sm. 34°; Sd. 222–225° (*J. pr.* [2] 69, 436 *C.* 1904 [2] 589).
- $C_9H_{12}O$  \*1)  $\alpha$ -Oxypropylbenzol. Sd. 106–108°<sub>18</sub> (*B.* 37, 2085 *C.* 1904 [2] 182).  
 \*18) Methyläther d. 2-Oxy-1-Aethylbenzol. Sd. 186–188°<sub>788</sub> (*B.* 36, 3591 *C.* 1903 [2] 1366).

- $C_9H_{12}O$
- \*21) Aethyläther d. Oxymethylbenzol. *Sd.* 187—189°<sub>732</sub> (*B.* 37, 3190 *C.* 1904 [2] 1109; *B.* 37, 3695 *C.* 1904 [2] 1387).
  - \*25) Propylphenyläther. *Sd.* 190—191° (*B.* 36, 2062 *C.* 1903 [2] 357).
  - \*26) Isopropylphenyläther. *Sd.* 176° (*B.* 36, 2062 *C.* 1903 [2] 357).
  - \*32) 4- $[\alpha$ -Oxyäthyl]-1-Methylbenzol. *Sd.* 219°<sub>766</sub> (*B.* 36, 1635 *C.* 1903 [2] 26).
  - \*34) Methyläther d. 4-Oxy-1-Aethylbenzol. *Sd.* 196—197°<sub>762</sub> (*B.* 36, 3593 *C.* 1903 [2] 1366).
  - 35) 2-Oxymethyl-1,4-Dimethylbenzol. *Sd.* 232—234° (*G.* 32 [2] 486 *C.* 1903 [1] 831).
  - 36) Methyläther d.  $\beta$ -Oxy- $\alpha$ -Phenyläthan. *Sd.* 189—190° (*C. r.* 138, 814 *C.* 1904 [1] 1195).
  - 37) Methyläther d. 3-Oxy-1-Aethylbenzol. *Sd.* 196—197°<sub>768</sub> (*B.* 36, 3592 *C.* 1903 [2] 1366).
  - 38) Methyläther d. 2-Methyl-1-Oxymethylbenzol. *Sd.* 187—188°<sub>760</sub> (*D.R.P.* 154658 *C.* 1904 [2] 1355).
  - 39) Methyläther d. 5-Oxy-1,3-Dimethylbenzol. *Sd.* 193° (*R.* 21, 328 *C.* 1903 [1] 78).
- $C_9H_{12}O_2$
- \*10) 5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol (*B.* 36, 1889 *C.* 1903 [2] 291).
  - \*32)  $\alpha$ -Camphylsäure. *Sm.* 148°; *Sd.* 248°<sub>740</sub> (*Soc.* 83, 849 *C.* 1903 [2] 571).
  - \*33)  $\beta$ -Camphylsäure. *Sm.* 105—106°; *Sd.* 248°<sub>740</sub> u. ger. Zers. *Ag* (*Soc.* 83, 867 *C.* 1903 [2] 573).
  - \*38) 1-Oxy-4-Keto-1,3,5-Trimethyl-1,4-Dihydrobenzol (*B.* 36, 2033 *C.* 1903 [2] 360).
  - \*41) *i*- $\alpha$ -Oxy- $\alpha$ -[2-Oxyphenyl]propan. *Sd.* 125—130°<sub>0,25</sub> (*B.* 36, 2586 *C.* 1903 [2] 621).
  - \*42)  $\alpha\beta$ -Dioxy- $\beta$ -Phenylpropan. *Sm.* 38° (*C. r.* 137, 1261 *C.* 1904 [1] 445).
  - 48) 3,4-Dioxy-1-Isopropylbenzol. *Sm.* 78°; *Sd.* 270—272° (*C. r.* 138, 1702 *C.* 1904 [2] 436).
  - 49) 4,6-Dioxy-1,2,3-Trimethylbenzol. *Sm.* 163—164° (*A.* 329, 309 *C.* 1904 [1] 794).
  - 50) 3,5-Dioxy-1,3,5-Trimethylbenzol. *Sm.* 160—162° (*M.* 24, 913 *C.* 1904 [1] 513).
  - 51) 2-Oxy-5-Oxymethyl-1,3-Dimethylbenzol. *Sm.* 104,5—105° (*B.* 36, 2035 *C.* 1903 [2] 360).
  - 52) 2-Methyläther d. 2-Oxy-1- $[\alpha$ -Oxyäthyl]benzol. *Sd.* 119—120°<sub>11</sub> (*B.* 36, 3588 *C.* 1903 [2] 1365).
  - 53) 3-Methyläther d. 3-Oxy-1- $[\alpha$ -Oxyäthyl]benzol. *Sd.* 132—133°<sub>12</sub> (*B.* 36, 3591 *C.* 1903 [2] 1366).
  - 54) 4-Methyläther d. 4-Oxy-1- $[\alpha$ -Oxyäthyl]benzol. *Fl.* (*B.* 36, 3592 *C.* 1903 [2] 1366).
  - 55) 5-Methyläther d. 2,5-Dioxy-1,3-Dimethylbenzol. *Sm.* 77—77,5° (*B.* 36, 2040 *C.* 1903 [2] 360).
  - 56) 1-Oxy-4-Keto-1,2,5-Trimethyl-1,4-Dihydrobenzol. *Sm.* 116—116,5° (*B.* 36, 2038 *C.* 1902 [2] 360; *B.* 36, 1627 *C.* 1903 [2] 31).
  - 57)  $\beta$ -Methyl- $\beta$ -Heptenin- $\eta$ -Carbonsäure. *Sd.* 160—164°<sub>24</sub> (*C. r.* 134, 554 *C.* 1903 [1] 825).
  - 58) 2-Methyl-R-Penten-4-[Aethyl- $\beta$ -Carbonsäure]. *Sm.* 64—65° (*B.* 36, 950 *C.* 1903 [1] 1022).
  - 59) Lakton (aus Umbellulon). *Sd.* 217—221° (*Soc.* 85, 645 *C.* 1904 [1] 1608 *C.* 1904 [2] 330).
  - 60) Verbindung (aus 2,6-Dimethylphenylhydroxylamin). *Sm.* 139,5—140,5° (*B.* 36, 2040 *C.* 1903 [2] 360).
- $C_9H_{12}O_3$
- \*5) 2,4,6-Trioxy-1,3,5-Trimethylbenzol + 3H<sub>2</sub>O. *Sm.* 184° (wasserfrei) (*A.* 329, 281 *C.* 1904 [1] 796).
  - \*11) Trimethyläther d. 1,2,3-Trioxybenzol. *Sm.* 47°; *Sd.* 235° (*A.* 327, 116 *C.* 1903 [1] 1214; *M.* 25, 516 *C.* 1904 [2] 1118).
  - \*13) Trimethyläther d. 1,3,5-Trioxybenzol. *Sm.* 52° (*Ar.* 242, 505 *C.* 1904 [2] 1386).
  - \*16)  $\alpha$ -Phenyläther d.  $\alpha\beta\gamma$ -Trioxypropan. *Sm.* 56° (*B.* 36, 2064 *C.* 1903 [2] 357).
  - \*26) Aethylester d. 2,5-Dimethylfuran-3-Carbonsäure. *Sd.* 210—214°<sub>740</sub> (*B.* 37, 2188 *C.* 1904 [2] 240).

- $C_9H_{12}O_8$  \*32) 2-Methyläther d. 2,4,6-Trioxo-1,3-Dimethylbenzol +  $H_2O$ . Sm. 148—150° (A. 329, 284 C. 1904 [1] 796).  
 34) 3,4-Dimethyläther d. 3,4-Dioxy-1-Oxymethylbenzol. Sd. 296—297°<sub>732</sub> (B. 37, 3403 C. 1904 [2] 1318).  
 35) 4,6-Dioxy-2-Keto-1,1,5-Trimethyl-1,2-Dihydrobenzol. Sm. 180 bis 181° (M. 24, 111 C. 1903 [1] 967).  
 36) Methylflicinsäure. Sm. 178—180° (A. 329, 292 C. 1904 [1] 796).  
 37) Äthylester d. 2,4-Dimethylfuran-3-Carbonsäure. Sd. 97°<sub>10</sub> (B. 35, 1539, 1545). — \*III, 507.
- $C_9H_{12}O_4$  29) 2,6-Diketo-hexahydrobenzol-1-Propionsäure. Sm. 181—182° (B. 37, 3823 C. 1904 [2] 1607).
- $C_9H_{12}O_5$  16)  $\beta$ -Hepten- $\gamma$ -Oxyd- $\alpha$ - $\beta$ -Dicarbonsäure (Valaktenbernsteinsäure). Ba, Ag<sub>2</sub> (A. 331, 193 C. 1904 [1] 1213).  
 17)  $\beta$ -Anhydrid d.  $\beta$ -Methylpentan- $\beta$ - $\gamma$ -Tricarbonsäure. Sm. 155—157°; Sd. 255° (Soc. 85, 136 C. 1904 [1] 727).
- $C_9H_{12}O_6$  20) Monoäthylester d. 1-Methyl-R-Trimethylen-2,2,3-Tricarbonsäure + 2[3] $H_2O$ . Sm. 70—71°. Ag<sub>2</sub> (B. 17, 2834; B. 36, 1086 C. 1903 [1] 1126). — I, 819.
- $C_9H_{12}O_8$  6) Succinglutarperoxyd. Sm. 107° u. Zers. (Am. 32, 64 C. 1904 [2] 766).  
 $C_9H_{12}N_2$  19)  $\alpha$ -Imido- $\beta$ -Amido- $\alpha$ -Phenylpropan (A. 291, 270). — \*III, 113.  
 20) Äthyl-2-Amidobenzylidenamin. Fl. (B. 37, 3656 C. 1904 [2] 1514).  
 21) 1-Hydraxonmethyl-4-Äthylbenzol. Sm. 101° (C. r. 136, 558 C. 1903 [1] 832).  
 22) 2-Methyl-1,2,3,4-Tetrahydro-1,3-Diazin. Pikrat (B. 36, 812 C. 1903 [1] 979).
- $C_9H_{12}Cl_2$  1) 3,5-Dichlor-1,1,6-Trimethyl-1,2-Dihydrobenzol. Sd. 120—125°<sub>31</sub> (C. 1904 [1] 88).
- $C_9H_{13}N$  \*9) 4-Amido-1-Propylbenzol. Sd. 224—226° (A. 327, 301 C. 1903 [2] 353).  
 51) 4-Amido-3-Äthyl-1-Methylbenzol. Sd. 218—220°.  $H_2SO_4$  (J. pr. [2] 69, 436 C. 1904 [2] 580).  
 52) 4-tert. Butylpyridin. Sd. 196—197°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 36, 2911 C. 1903 [2] 890).  
 53) Nitril d. r- $\alpha$ -Campholytsäure. Sd. 200—205° (C. r. 138, 696 C. 1904 [1] 1086).
- $C_9H_{14}O$  \*5) Isocamphoron (Soc. 81, 1526 C. 1903 [1] 157).  
 \*6) Campherphoron (A. 331, 318 C. 1904 [1] 1567).  
 \*26) Pulegenon. Sd. 189—190° (A. 327, 133 C. 1903 [1] 1412).  
 28)  $\beta$ -[4-Keto-hexahydrophenyl]propen. Sd. 184—186° (Soc. 85, 670 C. 1904 [2] 331).  
 29) Pinophoron. Sd. 203—205° (B. 37, 239 C. 1904 [1] 726).  
 30) Vetrirol. Sd. 150—155°<sub>10</sub> (D.R.P. 142416 C. 1903 [2] 229).  
 31) Aldehyd d.  $\alpha$ -Oktin- $\alpha$ -Carbonsäure. Sd. 90—92°<sub>13</sub> (C. r. 138, 1341 C. 1904 [2] 187).
- $C_9H_{14}O_2$  \*9) i- $\alpha$ -Campholytsäure. Sd. 160—162°<sub>45</sub> (Soc. 83, 853 C. 1903 [2] 572; Soc. 85, 147 C. 1904 [1] 728).  
 \*17) Isocampholakton. Sm. 32° (Am. 32, 290 C. 1904 [2] 1222).  
 \*44)  $\alpha$ -Oktin- $\alpha$ -Carbonsäure. Sd. 154—156°<sub>16</sub> (C. r. 136, 554 C. 1903 [1] 825; B. [3] 29, 658 C. 1903 [2] 487).  
 57)  $\zeta$ -Methyl- $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sm. — 16 bis — 12°; Sd. 169 bis 172°<sub>88</sub> (C. r. 136, 554 C. 1903 [1] 825).  
 58) 1,3-Dimethyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Fl. (D.R.P. 148206 C. 1904 [1] 485).  
 59) Lakton d. 5-Oxy-1,3-Dimethylhexahydrobenzol-2-Carbonsäure. Sd. 129—131°<sub>12</sub> (D.R.P. 148207 C. 1904 [1] 486).  
 60) isom. Lakton d. 5-Oxy-1,3-Dimethylhexahydrobenzol-2-Carbonsäure. Sd. 129—131°<sub>12</sub> (D.R.P. 148207 C. 1904 [1] 486).  
 61) Lakton d. i-5-Oxy-1,1,2-Trimethyl-R-Pentamethylen-2-Carbonsäure (Isocampholakton). Sd. 155—157°<sub>50</sub> (C. 1903 [1] 923; Soc. 85, 143 C. 1904 [1] 728).  
 62) Methyl ester d.  $\epsilon$ -Methyl- $\alpha$ -Hexin- $\alpha$ -Carbonsäure. Sd. 98—99°<sub>18</sub> (C. r. 136, 553 C. 1903 [1] 825).  
 63) Äthylester d.  $\alpha$ -Hexin- $\alpha$ -Carbonsäure. Sd. 106—108°<sub>24</sub> (C. r. 136, 553 C. 1903 [1] 824).

- $C_8H_{14}O_2$  64) Aethylester d.  $\gamma\gamma$ -Dimethyl- $\alpha$ -Butin- $\alpha$ -Carbonsäure. *Sd.* 75°<sub>15</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).
- $C_8H_{14}O_3$  \*30) Aethylester d. 4-Keto-1-Methyl-R-Pentamethylen-3-Carbonsäure. *Sd.* 118°<sub>18</sub> (*C. r.* 136, 1613 *C.* 1903 [2] 440).
- \*32) Aethylester d. 2-Keto-1-Methyl-R-Pentamethylen-3-Carbonsäure. *Sd.* 113°<sub>22</sub> (*C.* 1903 [2] 23).
- 35) i-Camphononsäure. *Sm.* 232° (*Am.* 28, 484 *C.* 1903 [1] 329).
- 36) Säure (aus Umbellulon). *Ba* (*Soc.* 85, 645 *C.* 1904 [2] 330).
- 37) 5-Keto-1,3-Dimethylhexahydrobenzol-1-Carbonsäure +  $H_2O$ . *Sm.* 124—125° (wasserfrei) (*B.* 37, 4062 *C.* 1904 [2] 1650; *B.* 37, 4071 *C.* 1904 [2] 1652).
- 38) Methylester d. 3-Keto-1,2-Dimethyl-R-Pentamethylen-2-Carbonsäure. *Sd.* 105—106°<sub>15</sub> (*C. r.* 138, 210 *C.* 1904 [1] 662).
- 39) Aethylester d. 4-Ketohexahydrobenzol-1-Carbonsäure. *Sd.* 158°<sub>40</sub> (*Soc.* 85, 427 *C.* 1904 [1] 1439).
- $C_8H_{14}O_4$  \*31) Aethylester d.  $\beta\delta$ -Diketoheptan- $\gamma$ -Carbonsäure. *Sd.* 161—163°<sub>50-51</sub> (*C.* 1903 [2] 1281).
- \*35) Diäthylester d. Propen- $\alpha\gamma$ -Dicarbonsäure. *Sd.* 129—131°<sub>18</sub> (*Bl.* [3] 29, 1012 *C.* 1903 [2] 1315).
- \*61) Aethylester d.  $\alpha\gamma$ -Diketoheptan- $\alpha$ -Carbonsäure. *Sd.* 228—232° u. Zers. *Na*, *Cu* (*Soc.* 81, 1490 *C.* 1903 [1] 138).
- \*63) Aethylester d.  $\gamma\delta$ -Diketo- $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. *Sd.* 230 bis 232° u. Zers. *Na*, *Ca*, *Ba*, *Cu*, *Co* (*Soc.* 81, 1486 *C.* 1903 [1] 138).
- 64) Hexahydrobenzol-1-Carbonsäure-3-Methylcarbonsäure. *Sm.* 158° (*B.* 36, 3611 *C.* 1903 [2] 1372).
- 65)  $\beta\delta$ -Lakton d.  $\delta$ -Oxypentan- $\beta\gamma$ -Dicarbonsäure- $\gamma$ -Aethylester. *Sd.* 142°<sub>14</sub> (*B.* 37, 1616 *C.* 1904 [1] 1403).
- 66)  $\beta\delta$ -Lakton d.  $\beta$ -Oxy- $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure- $\alpha$ -Aethylester. *Sd.* 285—287° (*B.* 36, 953 *C.* 1903 [1] 1017).
- 67)  $\delta$ -Aethylester d.  $\beta$ -Methyl- $\beta$ -Buten- $\gamma\delta$ -Dicarbonsäure. *Sm.* 118 bis 120° (*J. pr.* [2] 67, 199 *C.* 1903 [1] 869).
- $C_8H_{14}O_5$  \*5) Trioxydihydro- $\alpha$ -Camphylsäure. *Sm.* 148—150° u. Zers. *Ba* (*Soc.* 83, 855 *C.* 1903 [2] 572).
- 26)  $\delta$ -Ketoheptan- $\alpha\eta$ -Dicarbonsäure. *Sm.* 101—102° (u. *Sm.* 108—109°) (*B.* 37, 3817 *C.* 1904 [2] 1606).
- 27) Ketodioxyhydro- $\beta$ -Camphylsäure. *Fl.* (*Soc.* 83, 872 *C.* 1903 [2] 574).
- $C_8H_{14}O_6$  33) isom.  $\beta$ -Methylpentan- $\beta\gamma\delta$ -Tricarbonsäure. *Sm.* 155—157° (*C.* 1903 [1] 923; *Soc.* 85, 135 *C.* 1904 [1] 727).
- 34)  $\gamma$ -Methylpentan- $\alpha\delta\delta$ -Tricarbonsäure. *Sm.* 159° (*C.* 1903 [2] 1425).
- 35) Säure (aus Bernsteinsäuremonoäthylester) (*Bl.* [3] 29, 1046 *C.* 1903 [2] 1424).
- $C_8H_{15}N$  \*9) Nitril d.  $\beta$ -Methyl- $\beta$ -Hepten- $\zeta$ -Carbonsäure. *Sd.* 202° u. Zers. (*A.* 328, 345 *C.* 1903 [2] 1124).
- 10) Nitril d.  $\beta\epsilon$ -Dimethyl- $\beta$ -Hexen- $\zeta$ -Carbonsäure. *Sd.* 216—217° (*A.* 329, 102 *C.* 1903 [2] 1071).
- $C_8H_{16}O$  \*21) Aethyläther d. 1-Oxy-2,3,4,5-Tetrahydro-R-Hepten. *Sd.* 173 bis 175° (*A.* 327, 69 *C.* 1903 [1] 1124).
- \*23) 2-Keto-1-Methyl-3-Isopropyl-R-Pentamethylen (Dihdropulegenon). *Sd.* 184—185° (*A.* 327, 135 *C.* 1903 [1] 1412; *A.* 329, 108 *C.* 1903 [2] 1071; *B.* 37, 237 *C.* 1904 [1] 726).
- \*27) 2-Keto-1,1,4-Trimethylhexahydrobenzol (Pulenon). *Sd.* 183° (*A.* 329, 85 *C.* 1903 [2] 1370).
- 28) Pinocamphorylalkohol. *Sd.* 203° (*B.* 37, 240 *C.* 1904 [1] 726).
- 29) 5-Keto-4-Isopropyl-1-Methyl-R-Pentamethylen. *Sd.* 180—181° (*C.* 1904 [2] 1045).
- $C_8H_{16}O_2$  \*1) 2-Oxy-4-Acetyl-1-Methylhexahydrobenzol. *Sm.* 58—59°; *Sd.* 144 bis 145°<sub>13</sub> (*B.* 36, 766 *C.* 1903 [1] 836).
- \*36)  $\beta\delta$ -Diketononan (Caproylaceton). *Sd.* 100°<sub>20</sub>. *Cu* (*Bl.* [3] 27, 1086 *C.* 1903 [1] 225).
- \*38)  $\beta$ -Methyl- $\beta$ -Hepten- $\zeta$ -Carbonsäure. *Sd.* 242° (*A.* 328, 347 *C.* 1903 [2] 1124).
- 54) 1-Oxy-4-Keto-1-Isopropylhexahydrobenzol. *Sd.* 177—180°<sub>100</sub> (*Soc.* 85, 670 *C.* 1904 [2] 331).
- 55)  $\gamma\delta$ -Diketononan. *Sd.* 77—80°<sub>10</sub> (*Bl.* [3] 31, 1176 *C.* 1904 [2] 1701).

- $C_9H_{16}O_2$  56)  $\gamma$ - $\delta$ -Diketo- $\beta$ -Methyloktan (Butyrylisobutyrylmethan). Sd. 89—90°<sub>20</sub>. Cu (Bl. [3] 27, 1094 C. 1903 [1] 226).
- 57)  $\beta$ -Dimethyl- $\beta$ -Hexen- $\zeta$ -Carbonsäure. Sd. 143—147°<sub>23</sub>. Ag (A. 329, 102 C. 1903 [2] 1071).
- 58) Acetat d. 1-Oxy-1-Methylhexahydrobenzol. Sd. 176°<sub>780</sub> (C. r. 138, 1323 C. 1904 [2] 219).
- $C_9H_{16}O_3$  \*4)  $\gamma$ -Keto- $\beta$ -Methylheptan- $\zeta$ -Carbonsäure. Sd. 265°. Ag (A. 327, 142 C. 1903 [1] 1412; B. 37, 238 C. 1904 [1] 726).
- \*10)  $\alpha$ -Oxydihydrocampholytische Säure. Sd. 180—185°<sub>25</sub> (Am. 32, 289 C. 1904 [2] 1222).
- \*22) Aethylester d. 2-Oxyhexahydrobenzol-1-Carbonsäure. Sd. 100 bis 103°<sub>10</sub> (B. 37, 1278 C. 1904 [1] 1335).
- \*54) Methylester d.  $\beta$ -Ketoheptan- $\alpha$ -Carbonsäure. Sd. 118°<sub>19</sub> (Bl. [3] 27, 1092 C. 1903 [1] 226).
- \*55) Aethylester d.  $\delta$ -Oxy- $\beta$ -Hexen- $\epsilon$ -Carbonsäure. Sd. 110—112°<sub>15</sub> (C. 1903 [2] 556).
- \*57) Aethylester d.  $\epsilon$ -Keto- $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. Sd. 93—94°<sub>12</sub> (Bl. [3] 31, 1152 C. 1904 [2] 1707).
- 62) 5-Oxy-1,3-Dimethylhexahydrobenzol-2-Carbonsäure. Fl. (D.R.P. 148207 C. 1904 [1] 486).
- 63) cis-2-Oxy-1,1,2-Trimethyl-R-Pentamethylen-5-Carbonsäure. Fl. (Soc. 85, 144 C. 1904 [1] 728).
- 64)  $\beta$ -Oxy- $\alpha$ -Heptenmethyläther- $\alpha$ -Carbonsäure. Sm. 54,5° (C. r. 138, 287 C. 1904 [1] 719).
- 65)  $\zeta$ -Keto- $\beta$ -Methylheptan- $\gamma$ -Carbonsäure. Sd. 156°<sub>14</sub> (B. 37, 239 C. 1904 [1] 726).
- 66) Isocampholaktonsäure. Ag (Am. 32, 290 C. 1904 [2] 1222).
- 67) Säure (aus Dihydropulegenon). Sd. 154—155°<sub>15</sub> (A. 327, 139 C. 1903 [1] 1412).
- 68) Methylester d.  $\beta$ -Keto- $\gamma$ -Aethylpentan- $\gamma$ -Carbonsäure (M. d. Diäthylacetessigsäure). Sd. 206—207°<sub>750</sub> (C. 1903 [1] 225; Bl. [3] 29, 954 C. 1903 [2] 1111).
- 69) Isobutylester d.  $\alpha$ -Ketobutan- $\alpha$ -Carbonsäure. Sd. 87—88°<sub>11</sub> (Bl. [3] 31, 1150 C. 1904 [2] 1706).
- 70) Capronat d.  $\alpha$ -Oxy- $\beta$ -Ketopropan. Sd. 107—108°<sub>10</sub> (C. r. 138, 1275 C. 1904 [2] 93).
- $C_9H_{16}O_4$  \*24) Diäthylester d. Propan- $\alpha\alpha$ -Dicarbonsäure (C. r. 137, 714 C. 1903 [2] 1423).
- 62)  $\alpha$ -Cyklogeraniolenozonid. Sd. 80—100°<sub>10</sub> (B. 37, 849 C. 1904 [1] 1145).
- 63)  $\beta$ -Methylhexan- $\beta\epsilon$ -Dicarbonsäure. Sm. 114—115°. Ag<sub>2</sub> (A. 329, 92 C. 1903 [2] 1071).
- 64)  $\gamma$ -Methylhexan- $\alpha\delta$ -Dicarbonsäure. Sm. 97—98° (C. r. 138, 211 C. 1904 [1] 663).
- 65) 3,5-Dioxyhexahydrobenzoldimethyläther-1-Carbonsäure. Fl. (D.R.P. 81443). — \*II, 1023.
- 66) Monomethylester d.  $\beta\gamma$ -Dimethylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 63°. Ag (Soc. 85, 554 C. 1904 [1] 1485).
- 67) Monoäthylester d.  $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sd. 164—166° (C. 1903 [2] 288).
- 68) Aethylester d.  $\alpha$ -Acetoxyl- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sd. 202°<sub>750</sub> (Bl. [3] 31, 125 C. 1904 [1] 644).
- 69) Isobutylester d. 1- $\alpha$ -Acetoxylpropionsäure. Sd. 90—91°<sub>12</sub> (C. 1903 [2] 1419).
- 70) Diacetat d.  $\beta\delta$ -Dioxyptentan. Sd. 200—210° u. Zers. (C. 1904 [1] 1327).
- $C_9H_{16}O_5$  \*3)  $\gamma$ -Oxy- $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure (Bl. [3] 31, 118 C. 1904 [1] 643).
- \*9) Diäthylester d.  $\beta$ -Oxypropan- $\alpha\gamma$ -Dicarbonsäure. Sd. 156—157°<sub>28</sub> (Bl. [3] 29, 1014 C. 1903 [2] 1315).
- 19)  $\delta$ -Oxyheptan- $\alpha\gamma$ -Dicarbonsäure. Sm. 104—105°. Ba + 4H<sub>2</sub>O (B. 37, 3820 C. 1904 [2] 1606).
- 20)  $\alpha$ -Oxy- $\beta$ -Isopropylbutan- $\alpha\delta$ -Dicarbonsäure. Fl. (B. 36, 1751 C. 1903 [2] 117).

- $C_9H_{16}O_5$  21)  $\alpha$ -Aethylester d.  $\beta$ -Oxy- $\beta$ -Methylbutan- $\alpha$ -Dicarbonsäure. Ag (B. 36, 953 C. 1903 [1] 1017).
- $C_9H_{16}O_6$  8)  $\beta$ - $\zeta$ -Dimethylheptan- $\beta\gamma$ - $\epsilon$ -Diozonid. Fl. (B. 37, 847 C. 1904 [1] 1145).
- 9) Laktone d. Glykontrimethyläthersäure. Sd. 160°<sub>11</sub> (Soc. 83, 1040 C. 1903 [2] 347, 659).
- $C_9H_{16}N_2$  13) 1-Methyl-4[oder 5]-Amylimidazol. Sd. 158—160°<sub>10</sub>. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (Soc. 83, 444 C. 1903 [1] 930, 1143).
- $C_9H_{17}N$  25)  $r$ - $\alpha$ -Amidocampholen. Sd. 184—185° (C. r. 138, 696 C. 1904 [1] 1087).
- 26)  $\beta$ -Aethylchinolidin. Sd. 190—192°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 37, 3245 C. 1904 [2] 996).
- $C_9H_{18}O$  \*2)  $\zeta$ -Oxy- $\beta$ - $\zeta$ -Dimethyl- $\beta$ -Hepten. Sd. 73—75°<sub>10,5</sub> (B. 37, 845 C. 1904 [1] 1145).
- \*4)  $\delta$ -Oxy- $\delta$ - $\epsilon$ -Trimethyl- $\alpha$ -Hexen (C. 1903 [2] 1415).
- \*17)  $\beta$ -Ketononan. Sd. 194,5—195,5°<sub>783</sub> (Soc. 81, 1588 C. 1903 [1] 29, 162; B. 36, 2547 C. 1903 [2] 654).
- \*24) Oxyd (aus  $\alpha\gamma$ -Dioxy- $\beta\beta$ -Trimethylhexan). Sd. 139—140° (M. 24, 530 C. 1903 [2] 869).
- \*27)  $\delta$ -Oxy- $\delta$ -Methyl- $\alpha$ -Okten (C. 1903 [2] 1415).
- \*34) 2-Oxy-1-Methyl-3-Isopropyl-R-Pentamethylen. Sd. 185—192° (B. 37, 236 C. 1904 [1] 726).
- \*35) 2-Oxy-1,1,4-Trimethylhexahydrobenzol (Pulenol). Sd. 187—189° (A. 329, 87 C. 1903 [2] 1071).
- \*36) Dihydropulegenol. Sd. 77—78°<sub>15</sub> (A. 327, 135 C. 1903 [1] 1412).
- 39)  $\delta$ -Oxy- $\delta$ - $\zeta$ -Dimethyl- $\alpha$ -Hepten. Sd. 173°<sub>785</sub> (C. 1904 [2] 185).
- 40)  $\alpha$ -Oxyisopropylhexahydrobenzol. Sd. 96°<sub>30</sub> (C. r. 139, 345 C. 1904 [2] 704).
- 41) 1-Oxy-1-Propylhexahydrobenzol. Sd. 180°<sub>760</sub> u. Zers. (C. r. 138, 1321 C. 1904 [2] 219).
- 42) Methyläther d.  $\beta$ -Oxy- $\alpha$ -Okten. Sd. 166—168° (C. r. 138, 287 C. 1904 [1] 719; Bl. [3] 31, 524 C. 1904 [1] 1552).
- 43) Aethyläther d.  $\beta$ -Oxy- $\alpha$ -Hepten. Sd. 161—161,5° (C. r. 138, 287 C. 1904 [1] 719; Bl. [3] 31, 523 C. 1904 [1] 1551).
- 44)  $\delta$ -Ketononan. Sd. 75—76°<sub>10</sub> (Bl. [3] 31, 1158 C. 1904 [2] 1708).
- 45)  $\beta$ -Keto- $\delta$ -Methyloktan. Sd. 184°<sub>789</sub> (Soc. 81, 1595 C. 1903 [1] 15, 132).
- 46) Aldehyd d. Oktan- $\beta$ -Carbonsäure. Sd. 92°<sub>28</sub> (C. r. 138, 92 C. 1904 [1] 505).
- $C_9H_{18}O_2$  \*3) Pelargonsäure. Sm. 9—11,5°; Sd. 251—254°. Ca + H<sub>2</sub>O (Bl. [3] 29, 664 C. 1903 [2] 487; G. 34 [2] 54 C. 1904 [2] 693).
- \*4) Oktan- $\beta$ -Carbonsäure. Sd. 136°<sub>17</sub> (Bl. [3] 31, 748 C. 1904 [2] 303).
- \*9) Methyl ester d. Caprylsäure. Sd. 95°<sub>25</sub> (Bl. [3] 29, 1120 C. 1904 [1] 259).
- 50) 5-Oxy-2-Oxymethyl-1,3-Dimethylhexahydrobenzol. Sd. 159—161°<sub>14</sub> (D.R.P. 148207 C. 1904 [1] 486).
- 51) Aethyläther d.  $\zeta$ -Oxy- $\epsilon$ -Keto- $\beta$ -Methylhexan. Sd. 92—93°<sub>18</sub> (C. r. 138, 91 C. 1904 [1] 505).
- 52) Oxyd (aus d. Glycerin d. Methylallylnormalbutylcarbinol). Sd. 230 bis 232°<sub>743</sub> (C. 1904 [2] 185).
- 53) Isoheptylester d. Essigsäure (Acetat d.  $\zeta$ -Oxy- $\beta$ -Methylhexan). Sd. 183 bis 185°<sub>48</sub> (C. r. 136, 1261 C. 1903 [2] 106).
- $C_9H_{18}O_3$  41) Triäthyläther d.  $\alpha\gamma\gamma$ -Trioxypropan. Sd. 190—193° u. Zers. (B. 36, 3668 C. 1903 [2] 1312).
- 42)  $\alpha$ -Oxyoktan- $\alpha$ -Carbonsäure. Sm. 70° (C. r. 138, 698 C. 1904 [1] 1066).
- 43)  $\gamma$ -Oxybutteramyläthersäure. Sd. 148°<sub>15</sub> (C. r. 136, 96 C. 1903 [1] 455).
- 44) Aethylester d.  $\alpha$ -Oxy- $\beta$ -Methylpropanäthyläther- $\beta$ -Carbonsäure. Sd. 75°<sub>22</sub> (Bl. [3] 31, 128 C. 1904 [1] 644).
- $C_9H_{18}O_6$  5) Trimethyläther d. Glykose. Sd. 194° (Soc. 83, 1039 C. 1903 [2] 347, 659).
- $C_9H_{18}Br_2$  4)  $\beta\zeta$ -Dibrom- $\beta\zeta$ -Dimethylheptan. Sm. 35° (B. 37, 846 C. 1904 [1] 1145).

- $C_9H_{19}N$  30) *s*-Methylamido- $\beta$ *s*-Dimethyl- $\beta$ -Hexen. *Sd.* 167—168° (2HCl, PtCl<sub>4</sub>) (*B.* 36, 3369 *C.* 1903 [2] 1187).  
31) *r*- $\alpha$ -Dihydrocampholenamin. *Sm.* 190°. *Pikrat* (*C. r.* 136, 1143 *C.* 1903 [1] 1410).
- $C_9H_{20}O$  \*1)  $\alpha$ -Oxynonan. *Sd.* 215° (*C. r.* 138, 149 *C.* 1904 [1] 577; *Bl.* [3] 31, 674 *C.* 1904 [2] 184).  
\*3)  $\delta$ -Oxy- $\delta$ -Aethylheptan (*C.* 1903 [2] 1415).  
\*7) Methyläther d.  $\alpha$ -Oxyoktan. *Sd.* 75°<sub>20</sub> (*C. r.* 136, 1677 *C.* 1903 [2] 419; *Bl.* [3] 31, 673 *C.* 1904 [2] 184).  
\*12)  $\beta$ -Oxynonan. *Sd.* 195—196° (193—194°) (*Soc.* 81, 1592 *C.* 1903 [1] 29, 162; *B.* 36, 2548 *C.* 1903 [2] 654).  
16)  $\alpha$ -Oxy- $\beta$ -Methyloktan. *Sd.* 98—99°<sub>16</sub> (*Bl.* [3] 31, 748 *C.* 1904 [2] 303).  
17) *s*-Oxy- $\beta$ *s*-Dimethylheptan. *Sd.* 175° (*C.* 1904 [1] 1496).  
18) Butyläther d.  $\alpha$ -Oxypentan (Butylamyläther). *Sd.* 157°<sub>758</sub> (*C. r.* 138, 1610 *Ann.* *C.* 1904 [2] 429).
- $C_9H_{20}O_2$  7)  $\alpha$ -Dioxynonan. *Sm.* 45,5°; *Sd.* 177°<sub>15</sub> (*M.* 25, 1085 *C.* 1904 [2] 1698).  
8)  $\alpha$ -Aethyläther d.  $\alpha$  $\beta$ -Dioxy- $\beta$ -Aethylpentan. *Sd.* 180—184° (*C. r.* 138, 92 *C.* 1904 [1] 505).
- $C_9H_{20}O_3$  11)  $\delta$  $\zeta$  $\eta$ -Trioxy- $\beta$  $\delta$ -Dimethylheptan. *Fl.* (*C.* 1904 [2] 185).  
12) Aldehyd d.  $\alpha$ -Oxy- $\alpha$ -[2-Furanyl]- $\beta$ -Methylpropan- $\beta$ -Carbonsäure (*M.* 22, 311). — \*III, 520.
- $C_9H_{21}N$  \*6) Tripropylamin. (2HCl, PtCl<sub>4</sub>) (*C.* 1904 [1] 923).  
\*10)  $\beta$ -Amidononan. *Sd.* 69—69,5°<sub>11</sub>. (2HCl, PtCl<sub>4</sub>), *Pikrat* (*B.* 36, 2555 *C.* 1903 [2] 655).
- $C_9H_{21}N_3$  \*1) 1, 3, 5-Triäthylhexahydro-1, 3, 5-Triazin (R-Trimethylentriäthyltri-amin). *Sd.* 196—198° (200—210°). HBr, HJ, *Pikrat*, *Dipikrat* (*A.* 334, 217 *C.* 1904 [2] 899; D.R.P. 139394 *C.* 1903 [1] 678).  
\*2) isom. 1, 3, 5-Triäthylhexahydro-1, 3, 5-Triazin. (2HCl, PtCl<sub>4</sub>), HBr, HJ, (HJ + CHJ<sub>3</sub>), *Pikrat* (*A.* 334, 220 *C.* 1904 [2] 899).
- $C_9H_{23}N_3$  \*2) Di[Diäthylamido]methan. *Sd.* 168° (*B.* 37, 4088 *C.* 1904 [2] 1724).  
 $C_9H_{22}Sn$  1) Zinnmethyläthylidipropyl. *Sd.* 183—184°<sub>758</sub> (*C.* 1904 [1] 353).  
2) Zinntriäthylpropyl. *Sd.* 195°<sub>764</sub> (*C.* 1904 [1] 353).
- 9 III —
- $C_9H_4OCl_4$  2) 1,1,3,3-Tetrachlor-2-Keto-2,3-Dihydroinden. *Sm.* 98° (*A.* 334, 356 *C.* 1904 [2] 1054).
- $C_9H_4O_2Cl_2$  2) 6,8-Dichlor-4-Oxy-1,2-Benzpyron. *Sm.* 284° u. *Zers.* (*B.* 35, 464 *C.* 1903 [1] 636).
- $C_9H_7NBr_3$  17) 2,8,8-Tribromchinolin. *Sm.* 165° (*J. pr.* [2] 68, 102 *C.* 1903 [2] 445).  
 $C_9H_5OCl$  \*1) Chlorid d. Phenylpropionsäure. *Sd.* 119°<sub>12</sub> (*Soc.* 85, 1324 *C.* 1904 [2] 1645).
- $C_9H_5O_2Cl_3$  4)  $\beta$ -Chlor- $\beta$ -[2,4-Dichlorphenyl]akrylsäure. *Sm.* 173° (*B.* 37, 220, 224 *C.* 1904 [1] 588).
- $C_9H_5O_2Br_5$  2) Acetat d. 3,4,5,6-Tetrabrom-2-Oxy-1-Brommethylbenzol. *Sm.* 156° (*A.* 332, 178 *Ann.* *C.* 1904 [2] 209).
- $C_9H_5O_3Cl_3$  3)  $\alpha$ , 2-Lakton d.  $\beta\beta\beta$ -Trichlor- $\alpha$ -Oxy- $\alpha$ -[4-Oxyphenyl]äthan-2-Carbonsäure. *Sm.* 197—198° (*A.* 296, 344). — \*II, 1036.
- $C_9H_5O_4N$  12) Lakton d. 1-[ $\beta$ -Nitro- $\alpha$ -Oxyätheryl]benzol-2-Carbonsäure (Nitromethylenphthalid). *Sm.* 205—215° (*J.* 36, 571 *C.* 1903 [1] 710).
- $C_9H_5O_6N_3$  3) 5-Keto-3-[3,5-Dinitrophenyl]-4,5-Dihydroisoxazol. *Sm.* 173—175° u. *Zers.* (*J. pr.* [2] 69, 463 *C.* 1904 [2] 595).
- $C_9H_6NCl_2$  12) 1,6[oder 1,7]-Dichlorisochinolin. *Sm.* 95,5—96° (*B.* 37, 1977 *C.* 1904 [2] 236).
- $C_9H_6O_2N_2$  \*9) Nitril d.  $\alpha$ -Oximidobenzoylessigsäure. *Sm.* 120—121° (*B.* 37, 3468 *C.* 1904 [2] 1305).  
 $C_9H_6O_2N_4$  C 53,5 — H 3,0 — O 15,8 — N 27,7 — *M. G.* 202.  
1) Nitril d.  $\alpha$ -Oximido- $\beta$ -Nitrosimido- $\alpha$ -Phenylpropionsäure. *NH<sub>4</sub>* (*B.* 37, 3468 *C.* 1904 [2] 1305).
- $C_9H_6O_2Cl_4$  3) Acetat d. 2,3,5,6-Tetrachlor-4-Oxy-1-Methylbenzol. *Sm.* 112° (*A.* 328, 282 *C.* 1903 [2] 1245).
- $C_9H_6O_2Br_4$  \*1) Acetat d. 2,4,5,6-Tetrabrom-3-Oxy-1-Methylbenzol. *Sm.* 165° (*A.* 333, 356 *C.* 1904 [2] 1116).
- $C_9H_6O_3N_2$  \*6) 6-Nitro-2-Oxychinolin. *Sm.* 277° (*M.* 24, 100 *C.* 1903 [1] 922).

- $C_9H_6O_3N_2$  26) 6-Diazo-1,2-Benzpyron. Sulfat (*Soc.* 85, 1235 *C.* 1904 [2] 1124).  
 27) 4-Nitro-3-Phenylisoxazol. Sm. 116° (*A.* 328, 245 *C.* 1903 [2] 1000).  
 $C_9H_6O_3Cl_4$  \*1) 1-Acetat d. 2,3,5,6-Tetrachlor-4-Oxy-1-Oxymethylbenzol. Sm. 170° (*A.* 328, 296 *C.* 1903 [2] 1248).  
 2) Acetat d. 2,3,5,6-Tetrachlor-1-Oxy-4-Keto-1-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 135° (*A.* 328, 302 *C.* 1903 [2] 1248).  
 $C_9H_6O_4N_2$  \*8) 2,4,6-Triketo-5-Furalhexahydro-1,3-Diazin (*B.* 35, 4443 *C.* 1903 [1] 423).  
 10) 3-Nitroindol-2-Carbonsäure. Sm. 230° u. Zers. (*G.* 34 [2] 65 *C.* 1904 [2] 710).  
 $C_9H_6O_4Br_2$  2) 3,5-Dibrom-2-Acetoxybenzol-1-Carbonsäure. Sm. 156° (*Soc.* 81, 1481 *C.* 1903 [1] 23, 144).  
 3) 3,5-Dibrom-4-Acetoxybenzol-1-Carbonsäure. Sm. 207° (*Soc.* 81, 1483 *C.* 1903 [1] 23, 144).  
 $C_9H_6NJ$  \*5) 6-Jodchinolin. Sm. 91° (*A.* 332, 80 *C.* 1904 [2] 43).  
 $C_9H_6N_3Cl$  1) 3-Chlor-5-Phenyl-1,2,4-Triazin. Sm. 122—123° (*B.* 36, 4127 *C.* 1904 [1] 295).  
 $C_9H_6Cl_2Br_2$  1)  $\gamma\gamma$ -Dichlor- $\alpha\beta$ -Dibrompropen. Sm. 107° (*C. r.* 137, 127 *C.* 1903 [2] 570).  
 $C_9H_7ON$  \*2) 5-Phenylisoxazol. Sm. 18—22°; Sd. 254—256° (*B.* 36, 3671 *C.* 1903 [2] 1313; *C. r.* 138, 1341 *C.* 1904 [2] 187).  
 24)  $\gamma$ -Oximido- $\alpha$ -Phenylpropin. Sm. 108° (*B.* 36, 3671 *C.* 1903 [2] 1313).  
 25) Verbindung (aus Tryptophan). Sm. 195° (*C.* 1903 [2] 1012).  
 $C_9H_7ON_3$  \*4) Nitril d. Phenylhydrazoncyanessigsäure. Sm. 168° (*B.* 36, 3666 *C.* 1903 [2] 1312).  
 6) Acetophenonazocyanid. Sm. 72°. K (*A.* 325, 149 *C.* 1903 [1] 644).  
 7) 3-Oxy-5-Phenyl-1,2,4-Triazin. Sm. 234° (*A.* 325, 152 *C.* 1903 [1] 644).  
 $C_9H_7OCl$  5) Methyläther d. 4-Oxyphenyläthin. Sd. 133—138° (*B.* 36, 916 *C.* 1903 [1] 970).  
 $C_9H_7OCl_3$  1) Aldehyd d.  $\alpha\alpha\beta$ -Trichlor- $\beta$ -Phenylpropionsäure. Fl. (*C. r.* 136, 1073 *C.* 1903 [1] 1345).  
 $C_9H_7OCl_5$  1) Propyläther d. Pentachloroxybenzol. Sm. 49—50° (*B.* 37, 4019 *C.* 1904 [2] 1717).  
 $C_9H_7O_2N$  \*19) 6-Amido-1,2-Benzpyron. Sm. 163—164° (*Soc.* 85, 1230 *C.* 1904 [2] 1123).  
 \*38) Nitril d. 4-Acetoxybenzol-1-Carbonsäure. Sm. 57° (*B.* 36, 3974 *C.* 1904 [1] 163).  
 45) 2-Nitroinden. Sm. 141° u. Zers. (*B.* 28, 1333; *A.* 336, 3 *C.* 1904 [2] 1465). — \*II, 92.  
 46) 6[oder 7]-Oxy-1-Keto-1,2-Dihydroisochinolin. Sm. 270° (*B.* 37, 1976 *C.* 1904 [2] 236).  
 47) Phenylcyanessigsäure. Sm. 92° (*Am.* 32, 127 *C.* 1904 [2] 954).  
 48) Methylimid d. Benzol-1,2-Dicarbonsäure. Sm. 133—134° (*B.* 37, 1945 *C.* 1904 [2] 123).  
 49) Verbindung (aus  $\alpha$ -Oxamido- $\beta$ -Phenylpropionsäure). Sm. 148—150° (*B.* 36, 4310 *C.* 1904 [1] 448).  
 $C_9H_7O_2N_3$  25) Nitril d.  $\alpha$ -Nitro- $\beta$ -Phenylimidopropionsäure. Sm. 215—216° (*Am.* 29, 270 *C.* 1903 [1] 958).  
 26) 3-Cyanphenylamid d. Oxaminsäure. Sm. 246° (*C.* 1904 [2] 102).  
 $C_9H_7O_2Cl_3$  6)  $\alpha\alpha\beta$ -Trichlor- $\beta$ -Phenylpropionsäure. Sm. 112° (*C. r.* 136, 1073 *C.* 1903 [1] 1345).  
 7) Acetat d. 2,3,5-Trichlor-4-Oxy-1-Methylbenzol. Sm. 37—38° (*A.* 328, 281 *C.* 1903 [2] 1245).  
 $C_9H_7O_2Br$  \*3) Allo- $\alpha$ -Brom- $\beta$ -Phenylpropionsäure (*Soc.* 83, 673 *C.* 1903 [2] 115; *C.* 1904 [2] 439).  
 \*4)  $\beta$ -Brom- $\beta$ -Phenylakrylsäure (*Soc.* 83, 1156 *C.* 1903 [2] 1369).  
 \*5) Allo- $\beta$ -Brom- $\beta$ -Phenylakrylsäure. Sm. 159° (*B.* 36, 902 *C.* 1903 [1] 1133; *Soc.* 83, 1156 *C.* 1903 [2] 1369; *C.* 1904 [2] 439).  
 \*8)  $\beta$ -[4-Bromphenyl]akrylsäure (*B.* 37, 223 *C.* 1904 [1] 588).  
 $C_9H_7O_3N$  25) 2-Oxy-1,4-Diketo-1,2,3,4-Tetrahydroisochinolin (*B.* 36, 578 *C.* 1903 [1] 711).  
 26) 6[oder 7]-Oxy-1,4-Diketo-1,2,3,4-Tetrahydroisochinolin. Sm. noch nicht bei 300° (*B.* 37, 1975 *C.* 1904 [2] 236).

- $C_9H_7O_3N$  27)  $\beta$ -[3-Nitrosophenyl]akrylsäure. Zers. bei  $230^\circ$  (B. 37, 335 C. 1904 [1] 658; Am. 32, 396 C. 1904 [2] 1498).
- 28)  $\beta$ -[4-Nitrosophenyl]akrylsäure. Zers. oberh.  $220^\circ$  (Am. 32, 393 C. 1904 [2] 1498).
- $C_9H_7O_3N_3$  \*13) 5-Oxy-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm.  $179-180^\circ$  (B. 36, 1101 C. 1903 [1] 1140).
- 18) 5-Nitro-2-Acetyldiazol. Sm.  $158-159^\circ$  (B. 37, 2585 C. 1904 [2] 659).
- 19) 7-Nitro-2-Acetyldiazol. Sm.  $131-132^\circ$  (B. 37, 2576 C. 1904 [2] 658).
- 20) 5-Oxy-1-Phenyl-1,2,3-Triazol-4-Carbonsäure +  $H_2O$ . Sm.  $82-83^\circ$  K,  $K_2 + 2H_2O$  (B. 35, 4052 C. 1903 [1] 170).
- 21) 5-Keto-1-Phenyl-4,5-Dihydro-1,2,3-Triazol-4-Carbonsäure. Sm.  $111-112^\circ$  u. Zers. (B. 35, 4051 C. 1903 [1] 170).
- 22) 2-Phenyl-1,2,3,6-Oxtriazin-5-Carbonsäure. Sm.  $155^\circ$  u. Zers. Ag (Soc. 83, 1248 C. 1903 [2] 1421).
- 23) Nitril d. 3-Nitrobenzoylamidoessigsäure. Sm.  $118^\circ$  (B. 36, 1647 C. 1903 [2] 32).
- 24) Nitril d. 4-Nitrobenzoylamidoessigsäure. Sm.  $145^\circ$  (B. 36, 1647 C. 1903 [2] 32).
- $C_9H_7O_3Cl_3$  1) Acetat d. 2,3,5-Trichlor-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm.  $85-86^\circ$  (A. 328, 300 C. 1903 [2] 1248).
- $C_9H_7O_4N$  \*4)  $\beta$ -[4-Nitrophenyl]akrylsäure. +  $H_2SO_4$  (R. 21, 352 C. 1903 [1] 150; Am. 32, 392 C. 1904 [2] 1498).
- \*20) 3,4-Methylenäther d.  $\beta$ -Nitro- $\alpha$ -[3,4-Dioxyphenyl]äthen. Na (Bl. 3] 29, 525 C. 1903 [2] 244).
- 21) Methylester d. 1-Oxybenzoxazol-4-Carbonsäure. Sm.  $196,5^\circ$  (A. 325, 324 C. 1903 [1] 770).
- $C_9H_7O_4N_3$  \*2) 3,5-Dinitro-2-Methylindol. Zers. bei  $260^\circ$  (C. 1903 [2] 121; G. 34 [2] 64 C. 1904 [2] 710).
- $C_9H_7O_4Cl_3$  1) Acetat d. 3,5,6-Trichlor-1,2-Dioxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm.  $161^\circ$  u. Zers. (A. 328, 306 C. 1903 [2] 1248).
- $C_9H_7O_4Br$  7) 5-Brom-2-Acetoxybenzol-1-Carbonsäure. Sm.  $168^\circ$  (Soc. 81, 1482 C. 1903 [1] 23, 144).
- 8) 3-Brom-4-Acetoxybenzol-1-Carbonsäure. Sm.  $155^\circ$  (Soc. 81, 1483 C. 1903 [1] 23, 144).
- $C_9H_7O_5N$  \*2) 2-Oxalylamidobenzol-1-Carbonsäure +  $H_2O$ . Sm.  $210^\circ$  u. Zers. Ag (A. 332, 242 C. 1904 [2] 39).
- 22) 2-Nitrobenzoylessigsäure. Sm.  $117-120^\circ$  u. Zers. (Soc. 85, 151 C. 1904 [1] 725).
- 23) Nitromethylphenylketon-2-Carbonsäure. Sm.  $121,5^\circ$ . Ag<sub>2</sub> (B. 36, 575 C. 1903 [1] 710).
- 24) 2,3-Methylenätherester d. 5-Nitro-2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm.  $143^\circ$  (A. 330, 96 C. 1904 [1] 1076).
- 25) 3,4-Methylenätherester d. 6-Nitro-3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm.  $96^\circ$  (A. 330, 100 C. 1904 [1] 1076).
- 26) 1-Methylester d. 3-Nitrobenzol-1-Carbonsäure-2-Carbonsäurealdehyd. Sm.  $145-146^\circ$  (M. 24, 830 C. 1904 [1] 373).
- 27) 2-Methylester d. 4-Nitrobenzol-1-Carbonsäurealdehyd-2-Carbonsäure. Sm.  $85-86^\circ$  (M. 24, 825 C. 1904 [1] 372).
- 28) Pseudomethylester d. 3-Nitrobenzol-1-Carbonsäure-2-Carbonsäurealdehyd. Sm.  $106-108^\circ$  (M. 24, 829 C. 1904 [1] 373).
- 29) Pseudomethylester d. 4-Nitrobenzol-1-Carbonsäurealdehyd-2-Carbonsäure. Sm.  $101-103^\circ$  (M. 24, 823 C. 1904 [1] 372).
- $C_9H_7O_5N_3$  C 40,8 — H 2,6 — O 30,2 — N 26,4 — M. G. 265.
- 1) 4-Methyluraciliminoalloxan (Am. 31, 671 C. 1904 [2] 317).
- $C_9H_7O_6N$  \*12) 1-Methylester d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm.  $157^\circ$  (B. 35, 3861 C. 1903 [1] 154).
- \*13) 2-Methylester d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm.  $144^\circ$  (B. 35, 3861 C. 1903 [1] 154).
- \*14) 1-Methylester d. 4-Nitrobenzol-1,2-Dicarbonsäure. Sm.  $129^\circ$  (M. 24, 828 C. 1904 [1] 373).
- 17) 1,3-Methylbetaïn d. Pyridin-2,3,4-Tricarbonsäure +  $H_2O$  (M. 24, 712 C. 1904 [1] 218).

- $C_9H_7O_6N$  18) 2-Methylester d. 4-Nitrobenzol-1,2-Dicarbonsäure. Sm. 140—142° (*M.* 24, 827 *C.* 1904 [1] 373).
- $C_9H_7O_6N_5$  3) 5-Methylpurpursäure (*Am.* 31, 678 *C.* 1904 [2] 318).  
4) 7-Methylpurpursäure.  $NH_4 + H_2O$  (*Am.* 31, 674 *C.* 1904 [2] 317).  
5) Purpurmethylläthersäure (*Am.* 31, 679 *C.* 1904 [2] 318).
- $C_9H_7O_7N$  3) 2-Nitro-2-Acetoxy-4-Oxybenzol-1-Carbonsäure. Sm. 150° (*M.* 25, 39 *C.* 1904 [1] 723).
- $C_9H_7O_7N_5$  C 36,4 — H 2,4 — O 37,6 — N 23,6 — M. G. 297.  
1) Nitrodiacyandichinolnitrosäure.  $K_2$  (*Am.* 29, 118 *C.* 1903 [1] 709).
- $C_9H_7O_8N_3$  2) 4,6-Dinitrophenylamidoessigsäure-2-Carbonsäure. Sm. 186—187°.  
 $Ba + 2H_2O$ ,  $Ag$  (*G.* 33 [2] 333 *C.* 1904 [1] 278).
- $C_9H_7N_3S$  1) 3-Thiocarbonyl-5-Phenyl-3,4-Dihydro-1,2,4-Triazin. Sm. 200° (*B.* 36, 4128 *C.* 1904 [1] 295).
- $C_9H_7Cl_2Br$  1)  $\gamma\gamma$ -Dichlor- $\beta$ -Brom- $\alpha$ -Phenylpropen. Sm. 55°; Sd. 167—168°<sub>ss</sub> (*C. r.* 136, 1074 *C.* 1903 [1] 1345).
- $C_9H_8ON_2$  \*23) 4-Oxy-2-Methyl-1,3-Benzodiazin. Sm. 239° (*C.* 1903 [1] 174).  
\*37) Nitril d. 2-Acetylamidobenzol-1-Carbonsäure. Sm. 132,5° (*C.* 1903 [1] 174).  
\*46) Nitril d. Benzoylamidoessigsäure. Sm. 144° (*B.* 36, 1646 *C.* 1903 [2] 32).  
49) 4-Amido-3-Phenylisoxazol. Sd. 179°<sub>12</sub> (*A.* 328, 246 *C.* 1903 [2] 1000).  
50) Nitril d. 3-Acetylamidobenzol-1-Carbonsäure. Sm. 130,5—131° (*C.* 1904 [2] 101).  
51) Nitril d. 4-Acetylamidobenzol-1-Carbonsäure. Sm. 200° (*C.* 1903 [2] 113).  
52) Amid d. Phenylcyanessigsäure. Sm. 147° (*Am.* 32, 122 *C.* 1904 [2] 953).  
53) Verbindung (aus 5-Oxy-4-Methyl-1-Phenyl-1,2,3-Triazol). Zers. bei 163 bis 164° (*A.* 335, 101 *C.* 1904 [2] 1232).
- $C_9H_8OBr_2$  5)  $\alpha\beta$ -Dibromäthylphenylketon. Sm. 53—54° (*B.* 36, 1355 *C.* 1903 [1] 1299).
- $C_9H_8OBr_4$  3) Pseudotetrabrompropylphenol. Sm. 112—113° (*B.* 37, 1558 *C.* 1904 [1] 1438).
- $C_9H_8O_2N_2$  \*3) 2,5-Diketo-1-Phenyltetrahydroimidazol. Sm. 197° u. Zers. (*Am.* 28, 395 *C.* 1903 [1] 90).  
\*13) 1,3-Dioximido-2,3-Dihydroinden. Sm. 225° u. Zers. (*G.* 33 [2] 153 *C.* 1903 [2] 1272).  
\*34) 3-Nitro-2-Methylindol. Sm. 248° u. Zers.  $Na$  (*C.* 1903 [2] 121; *G.* 34 [2] 61 *C.* 1904 [2] 710).  
\*37) 2-Cyanmethyllamidobenzol-1-Carbonsäure. Sm. 182—184° u. Zers. (*D. R. P.* 142559 *C.* 1903 [2] 81; *B.* 37, 4082 *C.* 1904 [2] 1723).  
40) 6-Hydrazido-1,2-Benzpyron. Sm. 165—167° (*Soc.* 85, 1236 *C.* 1904 [2] 1124).  
41) Aldehyd d.  $\alpha$ -Phenylazo- $\beta$ -Oxyakrylsäure. Sm. 116° (*B.* 36, 3668 *C.* 1903 [2] 1312).
- $C_9H_8O_2N_4$  11) 5-Amido-1-Phenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 142°.  $K$  (*B.* 35, 4059 *C.* 1903 [1] 171).
- $C_9H_8O_2Cl_2$  13) Dichlormethylenäther d. 3,4-Dioxy-1-Aethylbenzol. Sd. 133—135°<sub>20</sub> (*C. r.* 138, 1702 *C.* 1904 [2] 436).  
14) 1- $[\beta\beta$ -Dichloräthyl]benzol-4-Carbonsäure. Sm. 179—181° (*B.* 36, 3905 *C.* 1903 [2] 1438).  
15) Acetat d. 3,5-Dichlor-4-Oxy-1-Methylbenzol. Sm. 48° (*A.* 328, 278 *C.* 1903 [2] 1245).
- $C_9H_8O_2Cl_4$  \*2) 1-Aethyläther d. 2,3,5,6-Tetrachlor-4-Oxy-1-Oxymethylbenzol. Sm. 128° (*A.* 328, 296 *C.* 1903 [2] 1248).
- $C_9H_8O_2Br_2$  \*4) 1- $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure (*Soc.* 83, 669 *C.* 1903 [2] 115).  
21) Methylenäther d. 3,4-Dioxy-1- $[\alpha\beta$ -Dibromäthyl]benzol. Sm. 160° (*G.* 34 [1] 369 *C.* 1904 [2] 214).
- $C_9H_8O_2S$  \*1)  $\alpha$ -Merkapto- $\beta$ -Phenylakrylsäure. Sm. 119° (*M.* 24, 507 *C.* 1903 [2] 836).
- $C_9H_8O_3N_2$  24) Methyläther d. 5-Oxy-4-Phenyl-1,2,3,6-Dioxdiazin. Sm. 69° (*A.* 328, 254 *C.* 1903 [2] 1001).  
25) Benzylidenharnstoff-2-Carbonsäure. Sm. 240° u. Zers. (*B.* 21 [2] 353; *C. r.* 106, 948. — II, 1626; \*II, 950).

- $C_9H_5O_3N_2$  26) Säure (aus d. Verb.  $C_{17}H_{10}O_2N_8$ ). Sm. 256° u. Zers. (C. 1904 [1] 1555).  
 27)  $\alpha$ -Amid d.  $\alpha$ -Imido- $\alpha$ -Phenylessigsäure-2-Carbonsäure (Imidophthalonaminsäure). Sm. 191—193°.  $NH_4$  (M. 25, 392 C. 1904 [2] 324).
- $C_9H_5O_3Cl_2$  7) Acetat d. 3,5-Dichlor-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 82—84° (A. 328, 299 C. 1903 [2] 1248).
- $C_9H_5O_3Br_2$  22) Aethylester d. 3,5-Dibrom-4-Oxybenzol-1-Carbonsäure. Sm. 99° (Soc. 81, 1483 C. 1903 [1] 23, 144).
- $C_9H_5O_4N_2$  \*5)  $\beta$ -[3-Nitro-4-Amidophenyl]akrylsäure. Sm. 218—224,5° (M. 24, 94 C. 1903 [1] 921).  
 \*11) Phenylhydrazonmethan- $\alpha$ - $\alpha$ -Dicarbonsäure. Sm. 163—164° (B. 37, 4171 C. 1904 [2] 1703).  
 \*22) Benzoat d.  $\alpha$ -Nitro- $\alpha$ -Oximidoäthan. Sm. 131° (G. 33 [1] 510 C. 1903 [2] 938).  
 24) 6-Nitroso-3-Acetylamidobenzol-1-Carbonsäure. Zers. bei 240° (M. 24, 7 C. 1903 [1] 775).  
 25) Aldehyd d. 5-Nitro-2-Acetylamidobenzol-1-Carbonsäure. Sm. 160 bis 161° (M. 24, 96 C. 1903 [1] 921).  
 26) Aldehyd d. 6-Nitro-3-Acetylamidobenzol-1-Carbonsäure. Sm. 161° (M. 24, 5 C. 1903 [1] 775).  
 27) Aldehyd d. 3-Nitro-4-Acetylamidobenzol-1-Carbonsäure. Sm. 155° (M. 24, 90 C. 1903 [1] 921).
- $C_9H_5O_4N_4$  3) 4,7-Dinitro-5,6-Dimethylindazol. Sm. 221—222° (B. 37, 2596 C. 1904 [2] 660).  
 4) 4,6-Dinitro-5,7-Dimethylindazol. Sm. 247° (B. 37, 2594 C. 1904 [2] 660).
- $C_9H_5O_4Cl_2$  2) Verbindung (aus Benzoëssäure u. Dichloressigsäure) (R. 21, 353 C. 1903 [1] 150).
- $C_9H_5O_5N_2$  \*4) 5-Nitro-2-Acetylamidobenzol-1-Carbonsäure. Sm. 221° (B. 36, 1801 C. 1903 [2] 283).  
 \*6) 3-Nitrobenzoylamidoessigsäure. Sm. 165° (B. 36, 1647 C. 1903 [2] 32).  
 \*7) 4-Nitrobenzoylamidoessigsäure (B. 36, 1648 C. 1903 [2] 32).  
 \*13) 3-Nitro-4-Acetylamidobenzol-1-Carbonsäure (D.R.P. 151725 C. 1904 [1] 1588).  
 21)  $\beta$ -Keto- $\alpha$ -[p-Dinitrophenyl]propan. Sm. 73—75° (Bl. [3] 19, 74). — \*III, 115.  
 21) Formyl-4-Nitrophenylamidoessigsäure. Sm. 159—160° u. Zers. (D.R.P. 154556 C. 1904 [2] 1012).  
 22) 6-Nitro-3-Acetylamidobenzol-1-Carbonsäure. Sm. 225° (M. 24, 8 C. 1903 [1] 775).
- $C_9H_5O_5S$  \*3)  $\beta$ -[4-Sulfofenyl]akrylsäure + 3[5]H<sub>2</sub>O. Na + 2H<sub>2</sub>O, Anilinsalz (C. 1903 [2] 438).
- $C_9H_5O_7N_4$  C 38,0 — H 2,8 — O 39,4 — N 19,7 — M. G. 284.  
 1) Dimethylamid d. 2,4,6-Trinitrobenzol-1-Carbonsäure. Sm. 144° (R. 21, 383 C. 1903 [1] 152).
- $C_9H_5O_8N_4$  \*2) Aethylester d. 2,4,6-Trinitrophenylamidoameisensäure. Sm. 147° (Soc. 85, 651 C. 1904 [2] 310).
- $C_9H_5N_2S$  4) 4-Thiocarbonyl-2-Methyl-4,5-Dihydro-1,3-Benzodiazin. Sm. 218 bis 219° u. Zers. (C. 1903 [1] 1270).
- $C_9H_5N_2S_2$  \*2) 2-Thiocarbonyl-5-Methyl-4-Phenyl-2,4-Dihydro-1,3,4-Thiodiazol (2-Methyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol-2,5-Sulfid). Sm. 216° (J. pr. [2] 67, 250 C. 1903 [1] 1264).
- $C_9H_5ClBr$  1)  $\alpha$ -Chlor- $\beta$ -Brom- $\alpha$ -Phenylpropan. Sd. 135—140°<sub>11</sub> (B. 36, 771 C. 1903 [1] 834).
- $C_9H_5Cl_2Br_2$  1)  $\gamma\gamma$ -Dichlor- $\alpha\beta$ -Dibrom- $\alpha$ -Phenylpropan. Sm. 127° (C. r. 136, 96 C. 1903 [1] 457).
- $C_9H_5ON$  \*17) 3-Methyl-2,4-Benzoxazin. HBr, Pikrat (B. 37, 2263 C. 1904 [2] 213).  
 \*20) Methylphthalimidin. HBr, (HJ, J<sub>2</sub>) (B. 36, 156 C. 1903 [1] 444).  
 \*21) Amid d.  $\beta$ -Phenylakrylsäure. Sm. 147° (M. 22, 428).  
 \*32) Nitril d. 4-Oxybenzoläthyläther-1-Carbonsäure (B. 36, 652 C. 1903 [1] 768).  
 40)  $\gamma$ -Phenylamido- $\gamma$ -Oxypropin. Sm. 122—123° (B. 36, 3667 C. 1903 [2] 1312).

- $C_9H_9ON$  41) polym. Anhydroalkohol (aus Methyl-4-Methylenamidophenylketon) (*C.* 1903 [1] 922).
- $C_9H_9ON_3$  42) Methyl-4-Methylenamidophenylketon. Sm. 170° (*C.* 1903 [1] 922).  
34) 5-Oxy-4-Methyl-1-Phenyl-1,2,3-Triazol. Zers. bei 133—134°.  $Na + 2H_2O, HCl + H_2O$  (*B.* 35, 4054 *C.* 1903 [1] 170; *A.* 335, 93 *C.* 1904 [2] 1232).
- 35) Nitril d. Methyl-4-Nitrosophenylamidoessigsäure. Sm. 114—116° (*B.* 37, 2637 *C.* 1904 [2] 519).
- $C_9H_9OBr$  11)  $\alpha$ -Brom- $\beta$ -Keto- $\alpha$ -Phenylpropan. Fl. (*G.* 33 [2] 262 *C.* 1904 [1] 24).
- $C_9H_9OBr_3$  10) Methyläther d. 2,4,6-Tribrom-5-Oxy-1,3-Dimethylbenzol. Sm. 111° (*B.* 21, 328 *C.* 1903 [1] 78).
- $C_9H_9O_2N$  \*8)  $\gamma$ -Oximido- $\gamma$ -Oxy- $\alpha$ -Phenylpropen. Cu (*G.* 34 [2] 70 *C.* 1904 [2] 733).  
\*36) Aldehyd d. 4-Acetylamidobenzol-1-Carbonsäure. Sm. 161° (*C.* 1903 [1] 883; *M.* 24, 89 *C.* 1903 [1] 921).  
\*38) Amid d. Benzoylessigsäure. Sm. 114—116° (*C.* 1904 [2] 905).  
\*42) Phenylamid d. Brenztraubensäure. Sm. 103—105° (*B.* 35, 4056 *C.* 1903 [1] 171).  
\*48) Nitril d.  $\alpha$ -Oxy- $\alpha$ -[4-Methoxyphenyl]essigsäure. Sm. 66—67° (*B.* 37, 3173 *C.* 1904 [2] 1303).
- 66) Aldehyd d. 3-Acetylamidobenzol-1-Carbonsäure. Sm. 84° (*M.* 24, 3 *C.* 1903 [1] 775).
- $C_9H_9O_2N_5$  \*10) *p*-Nitro-2,5-Dimethylbenzimidazol. Sm. 210° (*B.* 36, 3972 *C.* 1904 [1] 178).  
\*24) 5-Keto-3-Oxy-4-Methyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 223—224° (*B.* 36, 3149 *C.* 1903 [2] 1073; *B.* 37, 2337 *C.* 1904 [2] 315).  
27) Methyläther d. 3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 197° (*B.* 36, 3150 *C.* 1903 [2] 1073).  
28) 3,5-Diketo-1-Phenylhexahydro-1,2,4-Triazin. Sm. 225° (*B.* 36, 3884 *C.* 1904 [1] 27).  
29) *p*-Nitro-4,6-Dimethylbenzimidazol. Sm. 268° (*B.* 36, 3973 *C.* 1904 [1] 178).  
30) 4-Nitro-5,6-Dimethylindazol. Sm. 204° (*B.* 37, 2596 *C.* 1904 [2] 660).  
31) 7-Nitro-5,6-Dimethylindazol. Sm. 180,5—181,5° (*B.* 37, 2595 *C.* 1904 [2] 660).  
32) 4[oder 6]-Nitro-5,7-Dimethylindazol. Sm. 180—181° (*B.* 37, 2594 *C.* 1904 [2] 660).  
33) Nitril d. 3-Nitro-4-Dimethylamidobenzol-1-Carbonsäure. Sm. 114 bis 115° (*B.* 37, 1030 *C.* 1904 [1] 1207).  
34) Amid d. Acetophenonazocarbonsäure. Sm. 217° u. Zers. (*A.* 325, 151 *C.* 1903 [1] 644).
- $C_9H_9O_2N_5$  2) Azid d.  $\beta$ -Phenylureidoessigsäure. Sm. 92° u. Zers. (*J. pr.* [2] 70, 248 *C.* 1904 [2] 1463).
- $C_9H_9O_2Cl$  25) 2-Methylphenylester d. Chloressigsäure. Sd. 147° (i. V.) (*Ar.* 240, 634 *C.* 1903 [1] 24).  
26) 3-Methylphenylester d. Chloressigsäure. Sd. 170° (i. V.) (*Ar.* 240, 635 *C.* 1903 [1] 24).  
27) 4-Methylphenylester d. Chloressigsäure. Sm. 29—30°; Sd. 153 bis 154° (i. V.) (*Ar.* 240, 635 *C.* 1903 [1] 24).
- $C_9H_9O_2Br$  22) Methylenäther d. 3,4-Dioxy-1-[ $\alpha$ -Bromäthyl]benzol. Sm. 107° (*G.* 34 [1] 368 *C.* 1904 [2] 214).  
23)  $\alpha$ -Brom- $\beta$ -Phenylpropionsäure. Fl. (*B.* 37, 3064 *C.* 1904 [2] 1207).  
24) Benzoat d.  $\beta$ -Brom- $\alpha$ -Oxyäthan. Sd. 280—285° u. Zers. (*A.* 332, 209 *C.* 1904 [2] 211).
- $C_9H_9O_3N$  \*10) 2-Acetylamidobenzol-1-Carbonsäure. Sm. 186,5°. Ca (*B.* 36, 1800 *C.* 1903 [2] 283).  
\*11) 3-Acetylamidobenzol-1-Carbonsäure. Sm. 250° (*B.* 36, 1801 *C.* 1903 [2] 283).  
\*12) 4-Acetylamidobenzol-1-Carbonsäure. Sm. 256,5° (*B.* 36, 1801 *C.* 1903 [2] 283; *B.* 36, 4088 *C.* 1904 [1] 269; D.R.P. 151725 *C.* 1904 [1] 1587).  
\*33) 2-Amid d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 184° u. Zers. (*M.* 24, 952 *C.* 1904 [1] 916).  
\*48) Methylester d. 2-Formylamidobenzol-1-Carbonsäure. Sm. 42—43°; Sd. 169,8—170°<sub>13</sub> (*B.* 36, 2476 *C.* 1903 [2] 559).

- $C_9H_5O_3N$  \*49) Aethylester d. 2-Nitrosobenzol-1-Carbonsäure. Sm. 120—121° (*B.* 36, 2313 *C.* 1903 [2] 430; *B.* 36, 2701 *C.* 1903 [2] 996).  
50) 2-Methylformylamidobenzol-1-Carbonsäure. Sm. 167° (168,5—169°) (*D.R.P.* 139393 *C.* 1903 [1] 745; *B.* 36, 1805 *C.* 1903 [2] 284).  
51) Aethylester d. 3-Nitrosobenzol-1-Carbonsäure. Sm. 52—53° (*Am.* 32, 401 *C.* 1904 [2] 1500).  
52) Aethylester d. 4-Nitrosobenzol-1-Carbonsäure. Sm. 81° (*Am.* 32, 398 *C.* 1904 [2] 1499).  
53) Phenylester d. Acetylamidoameisensäure. Sm. 117° (*B.* 36, 3216 *C.* 1903 [2] 1055).  
54) 1-Amid d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 230° (*M.* 24, 956 *C.* 1904 [1] 916).  
55) Monamid d. Benzol-1,4-Dicarbonsäuremonomethylester. Sm. 201° (*B.* 37, 3223 *C.* 1904 [2] 1121).
- $C_9H_5O_3N_2$  18) Monophenyldiamid d. Oximidomalonsäure. Sm. 180—181° u. Zers. (*C.* 1904 [1] 1555).
- $C_9H_5O_3Cl$  \*2) Chloracetat d. 1,2-Dioxybenzolmonomethyläther. Sm. 58—60° (*Ar.* 240, 636 *C.* 1903 [1] 24).  
20) 4-Oxy-*p*-Chlormethyl-1-Methylbenzol-3-Carbonsäure. Sm. 169° (*D.R.P.* 113723). — \*II, 931.  
21) 3-Oxy-*p*-Chlormethyl-1-Methylbenzol-4-Carbonsäure. Sm. 192° (*D.R.P.* 113723). — \*II, 931.
- $C_9H_5O_3Br$  19) Aldehyd d. 6-Brom-3,4-Dioxybenzoldimethyläther-1-Carbonsäure? Sm. 150° (*B.* 37, 3815 *C.* 1904 [2] 1575).  
20) Aethylester d. 6-Brom-3-Oxybenzol-1-Carbonsäure. Sm. 94° (*G.* 32 [2] 336 *C.* 1903 [1] 579).
- $C_9H_5O_3Br_2$  6) Tribrommethylflicinsäure. Sm. 116°, 295 *C.* 1904 [1] 797).
- $C_9H_5O_4N$  \*6) 2,3,4-Triphenylamidobenzol-1-Carbonsäure (*D.R.P.* 142506 *C.* 1903 [2] 80; *D.R.P.* 142507 *C.* 1903 [2] 81; *D.R.P.* 143902 *C.* 1903 [2] 610; *D.R.P.* 147228 *C.* 1903 [2] 1485; *D.R.P.* 149346 *C.* 1904 [1] 847).  
\*38) 2,6-Dimethylpyridin-3,5-Dicarbonsäure. Sm. 315—320° (*J. pr.* [2] 69, 245 *C.* 1904 [1] 1358).  
\*49) Dimethylester d. Pyridin-2,6-Dicarbonsäure. Sm. 121° (*M.* 24, 205 *C.* 1903 [2] 48).  
\*74) 1,3-Methylbetaïn d. Pyridin-3,4-Dicarbonsäure-4-Methylester. Sm. 218° u. Zers. (*M.* 24, 522 *C.* 1903 [2] 889).  
81) 2,3-Methylenäther d. 5-Nitro-2-Oxy-3-Oxymethyl-1-Methylbenzol. Sm. 133° (*A.* 330, 94 *C.* 1904 [1] 1076).  
82) 3,4-Methylenäther d. 6-Nitro-3-Oxy-4-Oxymethyl-1-Methylbenzol. Sm. 137° (*A.* 330, 99 *C.* 1904 [1] 1076).  
83) 2-Oxyacetylamidobenzol-1-Carbonsäure. Sm. 167° (*D.R.P.* 153576 *C.* 1904 [2] 678).  
84) 1,4-Methylbetaïn d. Pyridin-3,4-Dicarbonsäure-3-Methylester +  $H_2O$ . Sm. 182° u. Zers. (*M.* 24, 523 *C.* 1903 [2] 889).  
85) Methylamid d. 3,4-Dioxybenzol-1-Ketocarbonsäure (Peradrenalon) (*C.* 1904 [2] 1512).
- $C_9H_5O_4N_2$  11) Methyläther d.  $\alpha$ -Amido- $\alpha$ -[3-Nitrobenzoylimido]- $\alpha$ -Oxymethan. Sm. 115° (*C.* 1904 [1] 1560).  
12) 5-Nitro-2-Acetylamidobenzaldoxim. Sm. 239° (*M.* 24, 97 *C.* 1903 [1] 921).  
13) 6-Nitro-3-Acetylamidobenzaldoxim. Sm. 189° (*M.* 24, 6 *C.* 1903 [1] 775).  
14) 3-Nitro-4-Acetylamidobenzaldoxim. Sm. 206° (*M.* 24, 91 *C.* 1903 [1] 921).  
15) Methylester d. 4-Nitrophenylhydrazonessigsäure. Zers. bei 170 bis 180° (*B.* 37, 3592 *C.* 1904 [2] 1378).  
16) Methylester d.  $\alpha$ -Phenylhydrazon- $\alpha$ -Nitroessigsäure. Sm. 74° (*A.* 328, 250 *C.* 1903 [2] 1000).
- $C_9H_5O_4Br$  \*3) 6-Brom-3,4-Dioxybenzoldimethyläther-1-Carbonsäure. Sm. 186° (*B.* 37, 3814 *C.* 1904 [2] 1575).
- $C_9H_5O_4N_2$  2) Amid d. 3-Nitrophenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 235° (*B.* 37, 4177 *C.* 1904 [2] 1704).  
3) Amid d. 4-Nitrophenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. oberh. 285° (*B.* 37, 4177 *C.* 1904 [2] 1704).

- $C_9H_9O_5N$  \*1) 1-Acetat d. 4-Nitro-1,2-Dioxybenzol-2-Methyläther. Sm. 101° (B. 36, 2257 C. 1903 [2] 428).
- \*35) Aldehyd d. 2-Nitro-3,4-Dioxybenzol-3,4-Dimethyläther-1-Carbonsäure. Sm. 64° (63°) (B. 35, 4397 C. 1903 [1] 340; B. 36, 2932 C. 1903 [2] 888; B. 36, 3528 C. 1903 [2] 1378).
- \*36) Aldehyd d. 6-Nitro-3,4-Dioxybenzol-3,4-Dimethyläther-1-Carbonsäure. Sm. 132° (B. 35, 4396 C. 1903 [1] 340).
- 37) 6-Nitroso-3,4-Dioxybenzoldimethyläther-1-Carbonsäure. Sm. 180 bis 190° u. Zers. (C. 1903 [2] 32).
- 38) Aldehyd d. 5-Nitro-3,4-Dioxybenzol-3,4-Dimethyläther-1-Carbonsäure. Sm. 90—91° (B. 35, 4399 C. 1903 [1] 341).
- 39) 2-Acetat d. 3-Nitro-1,2-Dioxybenzol-1-Methyläther. Sm. 135—136° (B. 36, 2257 C. 1903 [2] 428).
- $C_9H_9O_6N$  12) 1-2-Furanoylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 162—163°. Ba (B. 37, 2958 C. 1904 [2] 993).
- $C_9H_9O_6N_5$  2) Verbindung (aus Alloxantin). Zers. bei 240° (B. 37, 2687 C. 1904 [2] 830).
- $C_9H_9O_7N$  1) Aethylcarbonat d. 4-Nitro-1,2,3-Trioxybenzol. Sm. 134° (B. 37, 114 C. 1904 [1] 585).
- $C_9H_9O_7N_3$  5) Methyläther d. 2,4,6-Trinitro-5-Oxy-1,3-Dimethylbenzol. Sm. 127° (R. 21, 329 C. 1903 [1] 78).
- $C_9H_9O_8N_5$  2) 2,4,6-Trinitro-3-Aethylnitramido-1-Methylbenzol. Sm. 79° (R. 21, 333 C. 1903 [1] 78).
- 3) 2,5,6-Trinitro-4-Methylnitramido-1,3-Dimethylbenzol. Sm. 134° (R. 21, 334 C. 1903 [1] 79).
- 4) 2,4,6-Trinitro-5-Methylnitramido-1,3-Dimethylbenzol. Sm. 181° u. Zers. (R. 21, 331 C. 1903 [1] 78).
- $C_9H_9O_{10}N_7$  C 28,8 — H 2,4 — O 42,7 — N 26,1 — M. G. 375.
- 1) 2,4,6-Trinitro-3,5-Di[Methylnitramido]-1-Methylbenzol. Sm. 199 bis 200° u. Zers. (R. 23, 127 C. 1904 [2] 200).
- $C_9H_9O_{12}N_9$  C 24,8 — H 2,1 — O 44,1 — N 29,0 — M. G. 435.
- 1) 2,4,6-Trinitro-1,3,5-Tri[Methylnitramido]benzol. Sm. 200—203° u. Zers. (R. 23, 129 C. 1904 [2] 201).
- $C_9H_9N_2Cl$  7) 3-Chlormethylat d. 1,3-Benzdiazin. Sm. 171—172° (B. 37, 3653 C. 1904 [2] 1514).
- $C_9H_9N_2J$  4) 3-Jodmethylat d. 1,3-Benzdiazin. +  $CH_3O$ . Sm. 125—127° (B. 37, 3652 C. 1904 [2] 1513).
- $C_9H_9N_3S$  \*6) Methyläther d.  $\alpha$ -Cyanimido- $\alpha$ -Phenylamido- $\alpha$ -Merkaptomethan. Sm. 186°.  $NH_4$  (C. 1903 [2] 662; A. 331, 296 C. 1904 [2] 33).
- $C_9H_9BrMg$  1) Magnesiumbromidverbindung d.  $\beta$ -Phenylpropen (C. r. 135, 1348 C. 1903 [1] 328).
- $C_9H_{10}ON_2$  \*6)  $\alpha$ -Acetyl- $\beta$ -Benzylidenhydrazin. Sm. 137° (J. pr. [2] 69, 145 C. 1904 [1] 1274).
- 39) 3-Methylhydroxyd d. 1,3-Benzdiazin. Sm. 163—165°. Chlorid, Jodid (B. 37, 3652 C. 1904 [2] 1514).
- $C_9H_{10}OCl_2$  \*1) 4-Keto-1-Dichlormethyl-1,2-Dimethyl-1,4-Dihydrobenzol. Sm. 102 bis 103° (B. 35, 4216 C. 1903 [1] 161).
- \*2) 4-Keto-1-Dichlormethyl-1,3-Dimethyl-1,4-Dihydrobenzol. Sm. 56° (B. 35, 4216 C. 1903 [1] 161).
- \*35) Amid d.  $\beta$ -Amido- $\beta$ -Phenylakrylsäure. Sm. 164,5—165° (C. 1904 [2] 905).
- $C_9H_{10}OBr_2$  10)  $\beta$ -Bromäthyläther d. 3-Brom-4-Oxy-1-Methylbenzol. Sd. 172 bis 173°<sub>15</sub> (B. 36, 2875 C. 1903 [2] 834).
- $C_9H_{10}O_2N_2$  \*1) s-Acetylphenylharnstoff. Sm. 183—184° (Am. 30, 418 C. 1904 [1] 241).
- \*34) Monophenyldiamid d. Malonsäure +  $\frac{1}{2}H_2O$ . Sm. 153—154° (wasserfrei) (C. 1904 [1] 1555).
- 49) Methyläther d.  $\alpha$ -Benzoylamido- $\alpha$ -Imido- $\alpha$ -Oxymethan. Na, HCl (C. 1904 [1] 1559).
- 50) 2,4-Di[Formylamido]-1-Methylbenzol. Sm. 176—177° (D. R. P. 138839 C. 1903 [1] 427).
- 51) 3-Acetylamidobenzaldoxim. Sm. 185° (M. 24, 4 C. 1903 [1] 775).
- 52) Methylester d. Phenylhydrazonessigsäure. Sm. 139° (B. 36, 1936 C. 1903 [2] 189).

- $C_9H_{10}O_2N_2$  53) Amid d. 3-Acetylamidobenzol-1-Carbonsäure. Sm. 216—216,5° (C. 1904 [2] 101).
- $C_9H_{10}O_2N_4$  \*6) Amid d. Phenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 231—232° (B. 37, 4171 C. 1904 [2] 1703).
- 10) Amid d. 4-Methylphenylnitrosohydrazonessigsäure (J. pr. [2] 67, 412 C. 1903 [1] 1347).
- $C_9H_{10}O_3N_2$  \*17)  $\beta$ -Phenylureidoessigsäure (J. pr. [2] 70, 245 C. 1904 [2] 1463).
- \*44) 4-Nitro-3-Methylphenylamid d. Essigsäure. Sm. 103—104° (Soc. 83, 333 C. 1903 [1] 870).
- \*59) Aldehyd d. 3-Nitro-4-Dimethylamidobenzol-1-Carbonsäure (D.R.P. 92010; B. 37, 1028 C. 1904 [1] 1207).
- 69) Formyl-4-Amidophenylamidoessigsäure (D.R.P. 154556 C. 1904 [2] 1012).
- 70) Phenylhydrazonoxyessigmethyläthersäure. Zers. bei 99—100° (Soc. 85, 988 C. 1904 [2] 830).
- \*71) Aethylester d.  $\beta\delta$ -Dicyan- $\alpha$ -Ketovaleriansäure. Sm. 96—98° (Am. 30, 162 C. 1903 [2] 712).
- 72) Aldehyd d. 5-Nitro-2-Dimethylamidobenzol-1-Carbonsäure. Sm. 105° (M. 25, 368 C. 1904 [2] 322).
- 73) Hydroxylamid d. 2-Methylphenyloxaminsäure. Sm. 152° (Soc. 81, 1571 C. 1903 [1] 158).
- 74) Aethylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 120° (Am. 29, 309 C. 1903 [1] 1166).
- $C_9H_{10}O_3Br_2$  6) Dibrommethylflicinsäure. Sm. 142° (A. 329, 295 C. 1904 [1] 797).
- $C_9H_{10}O_3S$  8) Sulton d. 1-[ $\alpha$ -Oxyisopropyl]benzol-2-Sulfonsäure. Sm. 106—107° (B. 37, 3257 C. 1904 [2] 1031).
- $C_9H_{10}O_4N_2$  \*2) p-Dinitro-4-Aethyl-1-Methylbenzol. Sm. 51—52° (B. 36, 1875 C. 1903 [2] 286).
- \*25) 4-Amido-2,6-Dimethylpyridin-3,5-Dicarbonsäure (M. 23, 945 C. 1903 [1] 296).
- \*32) Aethylester d. 3-Nitro-4-Amidobenzol-1-Carbonsäure. Sm. 136° (D.R.P. 151725 C. 1904 [1] 1587).
- 46) Di[5-Keto-3-Methyl-4,5-Dihydro-4-Isoxazolyl]methan. Sm. 180 bis 183° u. Zers. (A. 332, 12 C. 1904 [1] 1564).
- 47) Nitrosodamascecin. Sm. 150—152° (Ar. 242, 321 C. 1904 [2] 457).
- 48) 3-Nitro-4-Dimethylamidobenzol-1-Carbonsäure. Sm. 214—215° (B. 37, 1031 C. 1904 [1] 1208).
- 49) Methylester d. 4-[oder 6]-Nitro-6-[oder 4]-Amidobenzol-1,3-Dicarbonsäure. Sm. 128° (G. 33 [2] 289 C. 1904 [1] 265).
- 50) Methylester d. 3-Ureido-4-Oxybenzol-1-Carbonsäure. Sm. 183° (D.R.P. 18945; A. 325, 321 C. 1903 [1] 770).
- $C_9H_{10}O_4N_4$  4) 2,6-Diketo-1,3,7-Trimethylpurin-8-Carbonsäure (D.R.P. 153121 C. 1904 [2] 626).
- 5) Methylester d. 2,6-Diketo-3,7-Dimethylpurin-8-Carbonsäure. Sm. 270° (D.R.P. 153121 C. 1904 [2] 626).
- 6) Aethylester d. 2,6-Diketo-3-Methylpurin-8-Carbonsäure. Sm. 304 bis 305° (D.R.P. 153121 C. 1904 [2] 625).
- $C_9H_{10}O_4S$  6)  $\gamma$ -Oxy- $\alpha$ -Phenylpropen- $\gamma$ -Sulfonsäure. Na (B. 37, 4044 C. 1904 [2] 1648).
- 7)  $\gamma$ -Oxy- $\alpha$ -Phenylpropan- $\gamma$ -Schwefelsäure. Na (B. 37, 4046 C. 1904 [2] 1648).
- 8) Aldehyd d.  $\beta$ -Phenylpropionsäure- $\beta$ -Sulfonsäure. Ba + 2 H<sub>2</sub>O (B. 37, 4046 C. 1904 [2] 1648).
- $C_9H_{10}O_5N_2$  11) Monamid d. 1-2-Furanoylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 172 bis 173°. Ba + 2 H<sub>2</sub>O, Cu + H<sub>2</sub>O, Ag (B. 37, 2959 C. 1904 [2] 993).
- $C_9H_{10}O_5Br_4$  1) Dimethylester d.  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Ketopentan- $\alpha\epsilon$ -Dicarbonsäure. Sm. 207° u. Zers. (B. 37, 3295 C. 1904 [2] 1041).
- $C_9H_{10}O_5S$  \*7) 1-Aethylester d. Benzol-1-Carbonsäure-2-Sulfonsäure. Na (Am. 30, 269 C. 1903 [2] 1119).
- 12) Dimethylester d. Benzol-1-Carbonsäure-3-Sulfonsäure. Sm. 32—33°; Sd. 198—200°<sub>20</sub> (M. 23, 1111 C. 1903 [1] 396).
- 13) Dimethylester d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. 88—90° (M. 23, 1127 C. 1903 [1] 396).

- $C_6H_{10}O_6N_2$  3) Dimethyläther d. 2,4-Dinitro-1-Dioxyethylbenzol. *Sd.* 183—185°<sub>13</sub> (*B.* 37, 1869 *C.* 1904 [1] 1601).
- 4) 1-Methyläther-2-Aethyläther d. 3,5-Dinitro-1,2-Dioxybenzol. *Sm.* 91° (*R.* 23, 112 *C.* 1904 [2] 205).
- $C_6H_{10}O_6N_4$  5) 2,4,6-Trinitro-3-Aethylamido-1-Methylbenzol. *Sm.* 98° (*R.* 21, 333 *C.* 1903 [1] 78).
- 6) 2,4,6-Trinitro-5-Methylamido-1,3-Dimethylbenzol. *Sm.* 164° (*R.* 21, 331 *C.* 1903 [1] 78).
- $C_6H_{10}O_6N_6$  C 36,2 — H 3,3 — O 32,2 — N 28,2 — M. G. 298.
- 1) 3,5-Dinitro-2,4-Di[Methylnitrosamido]-1-Methylbenzol. *Sm.* 132° (*J. pr.* [2] 67, 560 *C.* 1903 [2] 240).
- $C_6H_{10}O_7N_2$  5) Trimethyläther d. 2,4-Dinitro-1,3,5-Trioxybenzol. *Sm.* 165° +  $C_7H_8O$  (*Am.* 13, 179; *R.* 23, 116 *C.* 1904 [2] 205).
- $C_6H_{10}O_7N_4$  C 37,8 — H 3,5 — O 39,1 — N 19,6 — M. G. 286.
- 1) Methyläther d. 3,5-Dinitro-2-Aethylnitramido-1-Oxybenzol. *Sm.* 67° (*R.* 23, 113 *C.* 1904 [2] 205).
- $C_6H_{10}NCl$  5)  $\alpha$ -Chlor- $\alpha$ -Aethylimido- $\alpha$ -Phenylmethan. *Sd.* 110—111°<sub>15</sub> (*Soc.* 83, 320 *C.* 1903 [1] 580, 876).
- $C_6H_{10}NJ_3$  1) 4-Tri[Jodmethyl]methylpyridin (4-tert. Trijodbutylpyridin). *Sm.* 136° (*B.* 36, 2910 *C.* 1903 [2] 890).
- $C_6H_{10}Cl_2J_2$  1)  $\alpha\beta$ -Dichloräthyl-3-Methylphenyljodoniumjodid. *Sm.* 110° (*A.* 327, 285 *C.* 1903 [2] 351).
- $C_6H_{10}Cl_3J$  3)  $\alpha\beta$ -Dichloräthyl-3-Methylphenyljodoniumchlorid. *Sm.* 174°. 2 +  $PtCl_4$  (*A.* 327, 284 *C.* 1903 [2] 351).
- $C_6H_{11}ON$  \*31) 4-Methyl-3,4-Dihydro-1,4-Benzoxazin. *Sm.* 167—168°; *Sd.* 252 bis 254°<sub>789</sub>.  $HCl$  (*Soc.* 83, 758 *C.* 1903 [1] 1419 *C.* 1903 [2] 448).
- \*33) Aldehyd d. 4-Dimethylamidobenzol-1-Carbonsäure. *Sm.* 73°. + 2,4,6-Trinitro-1-Methylbenzol (*B.* 37, 859 *C.* 1904 [1] 1206; *B.* 37, 1733, 1745 *C.* 1904 [1] 1598).
- \*48) Dimethylamid d. Benzolcarbonsäure. *Sd.* 272—273° (*B.* 37, 2814 *C.* 1904 [2] 648).
- \*49) Aethylamid d. Benzolcarbonsäure. *Sm.* 68° (*B.* 36, 3526 *C.* 1903 [2] 1326; *B.* 37, 2815 *C.* 1904 [2] 648).
- \*56) Aethylphenylamid d. Ameisensäure. *Sd.* 89,5—91°<sub>14</sub> (*B.* 36, 2476 *C.* 1903 [2] 559).
- \*65) Aethyl-4-Amidophenylketon. *Sm.* 142° (*C.* 1903 [1] 1222).
- \*67) Aldehyd d. 4-Aethylamidobenzol-1-Carbonsäure. *Sm.* 79° (*B.* 37, 858 *C.* 1904 [1] 1206).
- \*70) Methyläther d.  $\alpha$ -Phenylimido- $\alpha$ -Oxyäthan. *Sd.* 81—82°<sub>12</sub> (*A.* 333, 294 *C.* 1904 [2] 905).
- 80) Methyläther d.  $\alpha$ -Methylimido- $\alpha$ -Oxy- $\alpha$ -Phenylmethan. *Sd.* 203 bis 206°.  $HCl$  (*Soc.* 83, 324 *C.* 1903 [1] 581, 876).
- 81) 2-Methylbenzimidomethyläther.  $HCl$  (*Soc.* 83, 769 *C.* 1903 [2] 200, 437).
- 82)  $\alpha$ -Oximido- $\beta$ -Phenylpropan (Oxim d.  $\alpha$ -Phenylpropionsäurealdehyd). *Sd.* 124°. — \*III, 41.
- 83) 4-Aethylbenzaloxim (1-Oximidomethyl-4-Aethylbenzol). *Sm.* 29° (*C. r.* 136, 558 *C.* 1903 [1] 832).
- 84) anti-2,4-Dimethylbenzaloxim. *Sm.* 85—86° (84—85,5°) (*C.* 1901 [2] 772; 1903 [2] 878; *B.* 36, 326 *C.* 1903 [1] 576; *G.* 32 [2] 490 *C.* 1903 [1] 831).
- 85) syn-2,4-Dimethylbenzaloxim. *Sm.* 126° (*B.* 36, 326 *C.* 1903 [1] 576).
- 86) anti-2,5-Dimethylbenzaloxim. *Sm.* 62,5—63,5° (60°) (*G.* 32 [2] 479 *C.* 1903 [1] 830; *B.* 36, 329 *C.* 1903 [1] 576).
- 87) syn-2,5-Dimethylbenzaloxim. *Sm.* 139° (133°) (*B.* 36, 329 *C.* 1903 [1] 576; *G.* 32 [2] 482 *C.* 1903 [1] 831).
- 88) anti-3,4-Dimethylbenzaloxim. *Sm.* 106° (*B.* 36, 327 *C.* 1903 [1] 576).
- 89) Aldehyd d. 6-Methylamido-1-Methylbenzol-3-Carbonsäure. *Sm.* 115° (*B.* 37, 863 *C.* 1904 [1] 1206).
- 90) Aldehyd d. 2-Dimethylamidobenzol-1-Carbonsäure. *Sd.* 120°<sub>11</sub> (244°). +  $H_2SO_4$ , (2 $HCl$ ,  $PtCl_4$ ) (*B.* 37, 973, 987 *C.* 1904 [1] 1079; *M.* 25, 371 *C.* 1904 [2] 322).

- $C_9H_{11}ON$  91) Amid d. 3-Methyleykloheptatriëncarbonsäure. Sm. 99° (*B.* 36, 3516 *C.* 1903 [2] 1275).  
 92) Amid d. 3-Methylnorcaradiëncarbonsäure. Sm. 131° (*B.* 36, 3514 *C.* 1903 [2] 1275).
- $C_9H_{11}ON_3$  14)  $\beta$ -Semicarbazon- $\alpha$ -Phenyläthan. Sm. 153° (*B.* 36, 3911 *C.* 1903 [2] 1439).  
 15) 2-Semicarbazonmethyl-1-Methylbenzol. Sm. 209° (*C. r.* 137, 717 *C.* 1903 [2] 1433).  
 16) 4-Semicarbazonmethyl-1-Methylbenzol. Sm. 215° u. Zers. (*C. r.* 137, 717 *C.* 1903 [2] 1433).  
 17) 3-Keto-4,5,6-Trimethyl-2,3-Dihydro-5,1,2-Benzotriazol + 3 H<sub>2</sub>O. Sm. 92° (167° wasserfrei). HJ (*B.* 36, 520 *C.* 1903 [1] 649).  
 18) Amid d. 2-Methylphenylhydrazonessigsäure. Sm. 186° (*J. pr.* [2] 67, 410 *C.* 1903 [1] 1347).  
 19) Amid d. 4-Methylphenylhydrazonessigsäure. Sm. 168° (*J. pr.* [2] 67, 410 *C.* 1903 [1] 1347).  
 20) Benzylidenhydrazid d. Amidoessigsäure. Sm. 157° (*J. pr.* [2] 70, 103 *C.* 1904 [2] 1035).
- $C_9H_{11}OCl$  \*7) Chlorid d.  $\alpha$ -Camphylsäure. Sd. 138—140°<sub>80</sub> (*Soc.* 83, 850 *C.* 1903 [2] 572).  
 10) Methyläther d.  $\alpha$ -Chlor- $\alpha$ -[2-Oxyphenyl]äthan. Fl. (*B.* 36, 3590 *C.* 1903 [2] 1365).  
 11) Aethyläther d. 2-Chlor-1-Oxymethylbenzol. Sd. 212° (*B.* 37, 3696 *C.* 1904 [2] 1387).  
 12) Aethyläther d. 3-Chlor-1-Oxymethylbenzol. Sd. 219° (*B.* 37, 3693 *C.* 1904 [2] 1387).
- $C_9H_{11}OBr$  9) Aethyläther d. 3-Brom-1-Oxymethylbenzol. Sd. 237° (*B.* 37, 3696 *C.* 1904 [2] 1387).
- $C_9H_{11}OJ$  3) Phenyläther d.  $\gamma$ -Jod- $\alpha$ -Oxypropan. Sm. 12°; Sd. 155—156°<sub>18</sub> (*C. r.* 136, 97 *C.* 1903 [1] 455).  
 4) 4-Jodoso-1-Propylbenzol. Explod. bei 105°. HClO<sub>4</sub>, HJO<sub>3</sub>, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>CrO<sub>4</sub> (*A.* 327, 304 *C.* 1903 [2] 353).  
 5) 4-Jodoso-3-Aethyl-1-Methylbenzol. Zers. bei 209°. H<sub>2</sub>SO<sub>4</sub> (*J. pr.* [2] 69, 437 *C.* 1904 [2] 589).
- $C_9H_{11}O_2N$  \*14) 2-Acetylamido-1-Oxymethylbenzol. Sm. 115—116°. HCl (*B.* 37, 2261 *C.* 1904 [2] 212).  
 \*26) Acetat d. 2-Amido-1-Oxymethylbenzol. HCl, HBr, Pikrat (*B.* 37, 2265 *C.* 1904 [2] 212).  
 \*35) 4-Aethyläther d. anti-4-Oxybenzaldoxim. Sm. 118° (83—84°?) (*B.* 36, 651 *C.* 1903 [1] 768).  
 \*49)  $\alpha$ -Amido- $\alpha$ -Phenylpropionsäure. Sm. 233° (*B.* 36, 4315 *C.* 1904 [1] 449).  
 \*51)  $r$ - $\alpha$ -Amido- $\beta$ -Phenylpropionsäure. Sm. 271—273° (231°) (*C.* 1903 [2] 33; *B.* 36, 4312 *C.* 1904 [1] 448; *B.* 37, 3064 *C.* 1904 [2] 1207).  
 \*59) Methylphenylamidoessigsäure. HCl (*B.* 37, 2637 *C.* 1904 [2] 518).  
 \*70) 2-Dimethylamidobenzol-1-Carbonsäure. Sm. 70°. (2 + HCl, AuCl<sub>3</sub>), HJ + 2 H<sub>2</sub>O (*B.* 37, 406, 409 *C.* 1904 [1] 942).  
 \*72) 4-Dimethylamidobenzol-1-Carbonsäure (*B.* 37, 411 Anm. *C.* 1904 [1] 943).  
 \*77) 2,4,6-Trimethylpyridin-3-Carbonsäure. Sm. 153—155°. (2HCl, PtCl<sub>4</sub>) (*B.* 37, 1337 *C.* 1904 [1] 1361).  
 \*83) Aethylester d. Phenylamidoameisensäure. Sm. 53°; Sd. 152°<sub>14</sub> (*B.* 36, 2476 *C.* 1903 [2] 539).  
 \*84) Aethylester d. 2-Amidobenzol-1-Carbonsäure. Sd. 137,5—138° (D.R.P. 139218 *C.* 1903 [1] 745; *B.* 36, 2476 *C.* 1903 [2] 559).  
 \*86) Aethylester d. 4-Amidobenzol-1-Carbonsäure. Benzylsulfonat,  $o$ -Phenolsulfonat,  $p$ -Phenolsulfonat, Phenol- $\alpha$ -Disulfonat,  $p$ -Kresol- $m$ -Sulfonat (D.R.P. 147580 *C.* 1904 [1] 130; D.R.P. 147790 *C.* 1904 [1] 131).  
 \*103) Phenylamid d. Oxyessigmethyläthersäure. Sm. 58° (*A.* 335, 93 *C.* 1904 [2] 1231).  
 \*114) 2-Aethylamidobenzol-1-Carbonsäure. Sm. 152—153° (D.R.P. 145604 *C.* 1903 [2] 1099).  
 \*117) Methyl ester d. Methylphenylamidoameisensäure. Sd. 235° (*Am.* 29, 300 *C.* 1903 [1] 1165).

- $C_9H_{11}O_2N$  126) 2-Methylacetyl-amido-1-Oxybenzol. Sm. 150° (*Soc.* 83, 756 *C.* 1903 [1] 1419; *C.* 1903 [2] 447).  
 127) 5-Acetyl-amido-2-Oxy-1-Methylbenzol. Sm. 179° (D.R.P. 147530 *C.* 1904 [1] 233).  
 128)  $\alpha$ -Oximido- $\alpha$ -[2-Oxy-4-Methylphenyl]äthan. Sm. 103° (*C.* 1904 [1] 1597).  
 129) 2-Methyläther d.  $\alpha$ -Oximido- $\alpha$ -[2-Oxyphenyl]äthan. Sm. 83° (*B.* 36, 3589 *C.* 1903 [2] 1365).  
 130) 4-Methyläther d.  $\beta$ -Oximido- $\alpha$ -[4-Oxyphenyl]äthan. Sm. 121—122° — \*III, 66.  
 131) Amid d. 3-Oxybenzoläthyläther-1-Carbonsäure. Sm. 139—139,5° (*A.* 329, 69 *C.* 1903 [2] 1440).  
 132)  $\beta$ -Oxyäthylamid d. Benzolcarbonsäure. Sm. 58° (*B.* 36, 1279 *C.* 1903 [1] 1215).
- $C_9H_{11}O_2N_8$  33) 2-Methylphenylamidofornylharnstoff. Sm. 180° (*Soc.* 81, 158 *C.* 1903 [1] 158).  
 34) 3-Oxy-2-Semicarbazonmethyl-1-Methylbenzol. Zers. bei 210° (*B.* 35, 4106 *C.* 1903 [1] 149).  
 35) 2-Oxy-3-Semicarbazonmethyl-1-Methylbenzol. Sm. 241° u. Zers. (*B.* 35, 4106 *C.* 1903 [1] 149).  
 36) 4-Oxy-3-Semicarbazonmethyl-1-Methylbenzol. Zers. bei 238° (*B.* 35, 4106 *C.* 1903 [1] 149).  
 37) Methyläther d. 4-Oxy-1-Semicarbazonmethylbenzol (Anisaldehyd-semicarbazon). Sm. 203—204° (*J. pr.* [2] 68, 247 *C.* 1903 [2] 1063).  
 38) Amid d.  $\beta$ -Phenylureidoessigsäure. Sm. 201° (*J. pr.* [2] 70, 249 *C.* 1904 [2] 1463).  
 39) Amid d. Methyl-4-Nitrosophenylamidooessigsäure. Sm. 179° (*B.* 37, 2638 *C.* 1904 [2] 519).  
 40) Amid d. 4-Aethoxyphenylazoameisensäure. Sm. 164—165° u. Zers. (*A.* 334, 185 *C.* 1904 [2] 835).  
 41) Diamid d. Benzol-1-Carbonsäure-3-Amidoessigsäure. Sm. 201—202° (*Bl.* [3] 29, 966 *C.* 1903 [2] 1118).  
 42) Hydroxylamid d.  $\alpha$ -Phenylhydrazonpropionsäure. Sm. 148° (*Soc.* 81, 1573 *C.* 1903 [1] 158).
- $C_9H_{11}O_2Cl$  4) Dimethyläther d. 3,4-Dioxy-1-Chlormethylbenzol. Sm. 50—51° (*B.* 37, 3404 *C.* 1904 [2] 1318).
- $C_9H_{11}O_2Br$  \*4) Brom- $\alpha$ -Camphylsäure. Sm. 107° (*Soc.* 83, 852 *C.* 1903 [2] 572).  
 \*5) Brom- $\beta$ -Camphylsäure. Sm. 152° (*Soc.* 83, 871 *C.* 1903 [2] 574).
- $C_9H_{11}O_2Br_3$  \*1) Tribromdihydro- $\alpha$ -Camphylsäure. Sm. 178° u. Zers. (*Soc.* 83, 852 *C.* 1903 [2] 572).
- $C_9H_{11}O_2J$  3) 4-Jodo-1-Propylbenzol. Explodirt bei 185—200° (*A.* 327, 308 *C.* 1903 [2] 353).  
 4) 4-Jodo-3-Aethyl-1-Methylbenzol. Zers. bei 229° (*J. pr.* [2] 69, 439 *C.* 1904 [2] 589).
- $C_9H_{11}O_8N$  \*25)  $\alpha$ -Oxamido- $\beta$ -Phenylpropionsäure. Sm. 165° u. Zers. (*B.* 36, 4309 *C.* 1904 [1] 448).  
 \*28) l-Tyrosin (*H.* 37, 18 *C.* 1903 [1] 60).  
 \*44) Aethylester d. 4-Oxyphenylamidooameisensäure. [Sm. 123° (*J. pr.* [2] 67, 341 *C.* 1903 [1] 1339).  
 \*51) Amid d.  $\alpha$ -Oxy- $\alpha$ -[4-Methoxyphenyl]essigsäure. Sm. 163—164° (*B.* 37, 3174 *C.* 1904 [2] 1303).  
 \*55) Damascenin. Ba, HCl + H<sub>2</sub>O (*Ar.* 242, 295 *C.* 1904 [2] 131; *Ar.* 242, 299 *C.* 1904 [2] 456).  
 \*60) Aethyl-2-Amidophenylester d. Kohlensäure (*Am.* 31, 475 *C.* 1904 [2] 94).  
 73) Methylamidomethyl-3,4-Dioxyphenylketon (Adrenalon). Zers. bei 230°. HCl, H<sub>2</sub>SO<sub>4</sub> (D.R.P. 152814 *C.* 1904 [2] 270; *C.* 1904 [2] 1512; *B.* 37, 4152 *C.* 1904 [2] 1744).  
 74) Damascenin-S + 3H<sub>2</sub>O. Sm. 144°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O), HBr + H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O, Cu + 1/2 H<sub>2</sub>O, Ag + H<sub>2</sub>O (*Ar.* 242, 304 *C.* 1904 [2] 456).  
 75) r-Tyrosin. Sm. 316° u. Zers. (*A.* 219, 170; 307, 142; *B.* 30, 2981; 32, 3640). — \*II, 929.

- $C_9H_{11}O_3N$  76) 3-Dimethylamido-1-Oxybenzol- $\beta$ -Carbonsäure. Sm. 145—146° u. Zers. (D.R.P. 50835). — \*II, 916.  
 77)  $\alpha$ -Oxamido- $\alpha$ -Phenylpropionsäure. Fl. (B. 36, 4315 C. 1904 [1] 449).  
 78) 6-Oxy-2-Methyl-5-Aethylpyridin-3-Carbonsäure. Sm. 305° u. Zers. (G. 33 [2] 168 C. 1903 [2] 1233).  
 79) 6-Oxy-2,5-Dimethylpyridin-6-Methyläther-3-Carbonsäure. Sm. 167—168° (G. 33 [2] 170 C. 1903 [2] 1233).  
 80) Methylester d.  $\beta$ -Amido-2-Oxy-1-Methylbenzol-4-Carbonsäure. HCl (C. 1897 [2] 672). — \*II, 922.  
 81) Methylester d. 3-Methylamido-4-Oxybenzol-1-Carbonsäure. Sm. 154° (A. 325, 329 C. 1903 [1] 770).  
 82) Aethylester d. 2-Hydroxylamidobenzol-1-Carbonsäure. Sm. 78,5° (B. 36, 2700 C. 1903 [2] 996).  
 83) Aethyl-4-Amidophenylester d. Kohlensäure (Am. 31, 467 C. 1904 [2] 94).  
 84) 1-Acetat d. 5-Amido-4-Oxy-1-Oxymethylbenzol. Sm. 105—107° (D.R.P. 148977 C. 1904 [1] 699).
- $C_9H_{11}O_5N_3$  16) 5-Nitro-2-Dimethylamidobenzaldoxim. Sm. 125° (M. 25, 369 C. 1904 [2] 322).  
 17) 3-Nitro-4-Dimethylamidobenzaldoxim. Sm. 132° (B. 37, 1030 C. 1904 [1] 1207).  
 18) 5-Nitro-2-Oxy-1,3-Dimethyl-2,3-Dihydrobenzimidazol. Sm. 128° (B. 36, 3969 C. 1904 [1] 177).  
 19)  $\alpha$ -Phenylsemicarbazidoessigsäure. Sm. 190—191° (B. 36, 3884 C. 1904 [1] 27).  
 20) Amid d. 3-Nitro-4-Dimethylamidobenzol-1-Carbonsäure. Sm. 210° (B. 37, 1741 C. 1904 [1] 1599).
- $C_9H_{11}O_3Br$  4)  $\alpha$ -[ $\beta$ -Bromphenyl]äther d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 81° (B. 36, 2064 C. 1903 [2] 357).
- $C_9H_{11}O_4N$  \*3) Dimethyläther d. 2-Nitro-1-Dioxymethylbenzol (B. 36, 3652 C. 1903 [2] 1332).  
 \*7) Dimethyläther d. 6-Nitro-3,4-Dioxy-1-Methylbenzol. Sm. 118° (118—120°) (B. 37, 1933 C. 1904 [2] 129; M. 25, 890 C. 1904 [2] 1313).  
 31) 6-Nitro-3,4-Dioxy-1-Propylbenzol. Sm. 73° (Ab. 242, 87 C. 1904 [1] 1007).  
 32) 2,4,6-Trioxo-5-Oximidomethyl-1,3-Dimethylbenzol. Zers. bei 168° (M. 24, 879 C. 1904 [1] 369).  
 33) Aethylester d.  $\alpha$ -Cyan- $\beta$ -Acetoxypropen- $\alpha$ -Carbonsäure. Sd. 115 bis 135° u. Zers. (Bl. [3] 31, 337 C. 1904 [1] 1135).  
 34) Aethylester d. 2-Furanylamidoessigsäure. Sm. 77° (B. 37, 2957 C. 1904 [2] 993).  
 35) Aethylester d.  $\beta$ -Acetylamidofuran-2-Carbonsäure. Sm. 177,5° (C. r. 136, 1455 C. 1903 [2] 292).
- $C_9H_{11}O_4N_3$  13) Semicarbazidomethyl-3,4-Dioxyphenylketon. Sm. 187° (B. 34, 100). — \*III, 109.
- $C_9H_{11}O_6N$  6) Trimethyläther d. 4-Nitro-1,2,3-Trioxybenzol. Sm. 44° (B. 37, 117 C. 1904 [1] 585).
- $C_9H_{11}O_6N_3$  C 44,8 — H 4,5 — O 33,2 — N 17,4 — M. G. 241.  
 1) Methyläther d. 3,5-Dinitro-4-Methylamido-2-Oxy-1-Methylbenzol. Sm. 117,5° (J. pr. [2] 67, 558 C. 1903 [2] 240).  
 2) Methyläther d. 3,5-Dinitro-2-Aethylamido-1-Oxybenzol. Sm. 123° (R. 23, 113 C. 1904 [2] 205).  
 3) Methyläther d. 4,6-Dinitro-3-Aethylamido-1-Oxybenzol. Sm. 148° (R. 23, 121 C. 1904 [2] 206).  
 C 40,1 — H 4,1 — O 29,7 — N 26,0 — M. G. 269.
- $C_9H_{11}O_5N_5$  1) 3,5-Dinitro-2-Methylamido-4-Methylnitrosamido-1-Methylbenzol. Sm. 186—187° (J. pr. [2] 67, 561 C. 1903 [2] 241).
- $C_9H_{11}O_6Cl$  1)  $\gamma$ -Lakton d.  $\zeta$ -Chlor- $\alpha$ -Oxy- $\beta$ -Ketohehexan- $\alpha\gamma$ -Dicarbonsäure- $\alpha$ -Methylester. Fl. Cu (C. r. 136, 436 C. 1903 [1] 698).  
 C 37,9 — H 3,8 — O 33,7 — N 24,6 — M. G. 285.
- $C_9H_{11}O_6N_5$  1) 2,4,6-Trinitro-3,5-Di[Methylamido]-1-Methylbenzol. Sm. 156° (R. 23, 127 C. 1904 [2] 201).
- $C_9H_{11}NS$  13) Phenyläther d.  $\alpha$ -Imido- $\alpha$ -Merkaptopropan. HCl (B. 36, 3466 C. 1903 [2] 1243).

- $C_9H_{11}NS$  14) Phenylamid d. Thiopropionsäure. Sm. 67—67,5° (B. 36, 587 C. 1903 [1] 830).
- $C_9H_{11}NS_2$  \*6) Dimethyläther d. Phenylimidodimerkaptomethan (C. r. 136, 452 C. 1903 [1] 699).
- \*7) Aethylphenylamidodithioameisensäure.  $NH_4$  (J. pr. [2] 67, 286 C. 1903 [1] 1306).
- 10) Methylbenzyläther d. Imidodimerkaptomethan. HJ (Bl. [3] 29, 54 C. 1903 [1] 446; C. r. 135, 976 C. 1903 [1] 139).
- $C_9H_{11}N_3S_2$  3) Methyläther d.  $\alpha$ -Thioureido- $\alpha$ -Phenylimido- $\alpha$ -Merkaptomethan. Sm. 122° (Am. 30, 172 C. 1903 [2] 871).
- 4) Methyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -Imido- $\alpha$ -Merkaptomethan. Sm. 124° (Am. 30, 172 C. 1903 [2] 871).
- $C_9H_{11}Cl_2J$  3) 4-Propylphenyljodidchlorid. Sm. 68° (A. 327, 304 C. 1903 [2] 353).
- 4) 4-Dichlorjodoso-3-Aethyl-1-Methylbenzol. Sm. 108° (J. pr. [2] 69, 437 C. 1904 [2] 589).
- $C_9H_{12}ON_2$  \*7) 4-Methylnitrosamido-1,3-Dimethylbenzol. Fl. (A. 327, 109 C. 1903 [1] 1213).
- \*37)  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Sm. 106° (A. 335, 253 C. 1904 [2] 1283).
- \*47) Amid d. Methylphenylamidoessigsäure. Sm. 163° (B. 37, 2637 C. 1904 [2] 518).
- \*50) Amid d. 4-Methylphenylamidoessigsäure. Sm. 168° (D.R.P. 142559 C. 1903 [2] 81).
- \*56) Aethyläther d.  $\alpha$ -Phenylamido- $\alpha$ -Imido- $\alpha$ -Oxymethan. Ag (C. 1904 [1] 1560).
- 66) 2-Dimethylamidobenzaldoxim. Sm. 87—87,2° (84—85°) (B. 37, 978 C. 1904 [1] 1079; M. 25, 373 C. 1904 [2] 322).
- 67) 4-Dimethylamidobenzaldoxim. Sm. 144° (B. 20, 3195; B. 37, 860 C. 1904 [1] 1206).
- 68) 4-Aethylamidobenzaldoxim. Sm. 118° (B. 37, 858 C. 1904 [1] 1206).
- 69) 2-[ $\beta$ -Acetylamidoäthyl]pyridin. Sd. 175° (B. 37, 172 C. 1904 [1] 673).
- $C_9H_{12}OCl_2$  1) 4-Oxy-1-Dichlormethyl-1,4-Dimethyl-1,4-Dihydrobenzol. Sm. 96° (B. 36, 1868 C. 1903 [2] 286).
- $C_9H_{12}O_2N_2$  \*43) 5-Nitro-3-Dimethylamido-1-Methylbenzol. Sm. 52° (C. 1903 [2] 1051).
- 53)  $\alpha$ -[ $\beta$ -Oxyäthyl]- $\beta$ -Phenylharnstoff. Sm. 122—123° (B. 36, 1280 C. 1903 [1] 1215).
- 54) Aethylester d. 3,4-Diamidobenzol-1-Carbonsäure. Sm. 112—113° (D.R.P. 151725 C. 1904 [1] 1587).
- 55) Aethylester d. 3,6-Dimethyl-1,2-Diazin-4-Carbonsäure. Sm. 55—57° (B. 36, 512 C. 1903 [1] 654; B. 37, 2187 C. 1904 [2] 240).
- 56) Amid d. 2-Oxyphenylamidoessigmethyläthersäure. Sm. 153—154° (Bl. [3] 29, 967 C. 1903 [2] 1118).
- 57) Amid d. 4-Oxyphenylamidoessigmethyläthersäure. Sm. 145—146° (Bl. [3] 29, 967 C. 1903 [2] 1118).
- $C_9H_{12}O_2N_4$  13) 2,6-Diketo-1,3-Diäthylpurin (Diäthylxanthin). Sm. 208° (C. 1904 [2] 1497).
- 14) Hydrazid d.  $\beta$ -Phenylureidoessigsäure. Sm. 186,5°. HCl (J. pr. [2] 70, 247 C. 1904 [2] 1463).
- $C_9H_{12}O_2Br_2$  \*1) Dibromdihydro- $\alpha$ -Camphylsäure. Sm. 165—170° u. Zers. (Soc. 83, 852 C. 1903 [2] 572).
- \*2) Dibromdihydro- $\beta$ -Camphylsäure. Sm. 172° u. Zers. (Soc. 83, 870 C. 1903 [2] 574).
- $C_9H_{12}O_3N_2$  \*7) Aethylester d. 5-Acetyl-4-Methylpyrazol-3-Carbonsäure. Sm. 121° (Am. 325, 181 C. 1903 [1] 646).
- 8) 3-Acetyl-4-Methyl-1-Aethylpyrazol-5-Carbonsäure. Sm. 167—168° (B. 36, 1131 C. 1903 [1] 1138).
- 9) Methylderivat d.  $\gamma$ -Dicyanacetessigsäureäthylester. Sm. 110—113° (A. 332, 138 C. 1904 [2] 190).
- $C_9H_{12}O_3S$  \*16) 1,2,4-Trimethylbenzol-5-Sulfonsäure. +  $H_3PO_4$  (R. 21, 356 C. 1903 [1] 151).
- \*21) Aethylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 32—33° (A. 327, 121 C. 1903 [1] 1221).

- $C_9H_{12}O_3S$  25)  $\alpha$ -Oxyäthyl-4-Methylphenylsulfon. Sm. 52—72° (*Am.* 31, 166 *C.* 1904 [1] 875).
- $C_9H_{12}O_3Se$  1) d-Methylphenylselenetin. d-Bromcamphersulfonat (*Soc.* 81, 1554 *C.* 1903 [1] 22, 144).  
2) l-Methylphenylselenetin. d-Bromcamphersulfonat (*Soc.* 81, 1555 *C.* 1903 [1] 22, 144).
- $C_9H_{12}O_4N_2$  \*3) Diäthylester d.  $\beta$ -Cyan- $\beta$ -Imidoäthan- $\alpha\alpha$ -Dicarbonsäure (D. d. Dicyanmalonsäure). Sm. 93° (*A.* 332, 118 *C.* 1904 [2] 189).  
5) l-Methyläther-4-Aethyläther d. 5-Nitro-2-Amido-1,4-Dioxybenzol. Sm. 148° (D.R.P. 141975 *C.* 1903 [1] 1380).  
6)  $\alpha$ -Cyan- $\alpha$ -Oxyessig- $[\beta$ -Cyan- $\alpha$ -Aethoxypropyl]äthersäure. Sm. 145° (*C.* 1904 [1] 159).  
7) Aethylester d. 1-Acetyl-3-Keto-5-Methyl-2,3-Dihydropyrazol-2-Carbonsäure. Sm. 58° (P. GUTMANN, Dissert., Heidelberg 1903).  
8) Diäthylester d. isom. Dicyanmalonsäure. Sm. 123° (*A.* 332, 119 *C.* 1904 [2] 189).
- $C_9H_{12}O_4N_4$  3) 3,5-Dinitro-2,4-Di[Methylamido]-1-Methylbenzol. Sm. 169—170° (*J. pr.* [2] 67, 546 *C.* 1903 [2] 240).  
4) 2,4-Dinitro-3,5-Di[Methylamido]-1-Methylbenzol. Sm. 140° (*R.* 23, 126 *C.* 1904 [2] 200).
- $C_9H_{12}O_4S_2$  2)  $\alpha$ -Aethylsulfon- $\alpha$ -Phenylsulfonmethan. Sm. 110—111° (*B.* 36, 300 *C.* 1903 [1] 500).  
3) 2,4-Di[Methylsulfon]-1-Methylbenzol. Sm. 153—154° (*J. pr.* [2] 68, 335 *C.* 1903 [2] 1172).  
4) Dimethylester d. 1-Methylbenzol-2,4-Disulfinsäure. Fl. (*J. pr.* [2] 68, 335 *C.* 1903 [2] 1172).
- $C_9H_{12}O_5N_6$  \*1) Dipyruvintriureid + 2H<sub>2</sub>O (*C. r.* 136, 507 *C.* 1903 [1] 763).
- $C_9H_{12}O_5Br_2$  1) Dimethylester d.  $\beta\beta$ -Dibrom- $\gamma$ -Ketopentan- $\alpha\alpha$ -Dicarbonsäure. Sm. 58° (*B.* 37, 3295 *C.* 1904 [2] 1041).
- $C_9H_{12}O_5S_2$  2)  $\gamma$ -Oxy- $\alpha$ -Phenylpropan- $\alpha\gamma$  (oder  $\beta\gamma$ )-Disulfonsäure. K + H<sub>2</sub>O, Ba + 3H<sub>2</sub>O (*B.* 24, 1806; *B.* 37, 4045 *C.* 1904 [2] 1648).
- $C_9H_{12}N_2S$  \*13) Aethyläther d. Phenylamidoimidomerkaptomethan (*Soc.* 83, 553 *C.* 1903 [1] 1123).  
14) Methyläther d. 2-Methylphenylamidoimidomerkaptomethan. Sm. 101—102°. HCl (*Soc.* 83, 556 *C.* 1903 [1] 1123; *Am.* 30, 179 *C.* 1903 [2] 872).  
15) Methyläther d. 4-Methylphenylamidoimidomerkaptomethan. Sm. 65—67°. HCl, HJ (*Soc.* 83, 557 *C.* 1903 [1] 1123; *Am.* 30, 173 *C.* 1903 [2] 871).
- $C_9H_{12}N_2S_2$  5) Methylester d.  $\beta$ -[2-Methylphenyl]hydrazidodithioameisensäure. Sm. 148° (*B.* 36, 1370 *C.* 1903 [1] 1342).  
6) Methylester d.  $\beta$ -[3-Methylphenyl]hydrazidodithioameisensäure. Sm. 111° (*B.* 36, 1372 *C.* 1903 [1] 1343).
- $C_9H_{12}N_4S_2$  \*1) 2,4-Di[Thioureido]-1-Methylbenzol (4-Methyl-1,3-Phenylendithioharnstoff) (D.R.P. 144762 *C.* 1903 [2] 814; D.R.P. 139429 *C.* 1903 [1] 904).
- $C_9H_{13}ON$  44) 2-Methyläthylamido-1-Oxybenzol. HCl (*Soc.* 83, 757 *C.* 1903 [1] 1419 *C.* 1903 [2] 447).  
45) Methyläther d. 2-Amido-5-Oxy-1,3-Dimethylbenzol. Sm. 42,5—43° (*B.* 36, 2039 *C.* 1903 [2] 360).  
46) Nitril d. 5-Keto-1,3-Dimethylhexahydrobenzol-1-Carbonsäure. Sm. 92—94° (*B.* 37, 4061 *C.* 1904 [2] 1050).
- $C_9H_{13}ON_8$  \*7)  $\beta$ -Phenylamido- $\alpha$ -Aethylharnstoff. Sm. 151° (*B.* 36, 1377 *C.* 1903 [1] 1344).  
16)  $\alpha$ -Amido- $\beta$ -Aethyl- $\alpha$ -Phenylharnstoff. Sm. 88° (*B.* 36, 1376 *C.* 1903 [1] 1344).  
17) Inn. Anhydrid d. 2-Semicarbazon-1-Oxymethylen-R-Heptamethylen. Sm. 181—183° (*A.* 329, 128 *C.* 1903 [2] 1323).  
18) Inn. Anhydrid d. 3-Semicarbazon-4-Oxymethylen-1-Methylhexahydrobenzol. Sm. 154—157° (*A.* 329, 119 *C.* 1903 [2] 1322).
- $C_9H_{13}OCl$  \*2) Chlorid d.  $\alpha$ -Oktin- $\alpha$ -Carbonsäure. Sd. 113—116°<sub>25</sub> (*C. r.* 136, 554 *C.* 1903 [1] 825).
- $C_9H_{13}O_2N$  \*3) Anhydroecgonin. (HBr, Br<sub>2</sub>) (*Ar.* 242, 9 *C.* 1904 [1] 731).  
\*7) Aethylester d. 2,5-Dimethylpyrrol-3-Carbonsäure. Sm. 117° (*C.* 1903 [2] 1281).

- $C_9H_{13}O_2N$  12) 2,5-Dimethyl-1-Aethylpyrrol-3-Carbonsäure (*C.* 1903 [2] 1281).
- $C_9H_{13}O_2N_3$  4) *p*-Nitro-3,4-Di[Methylamido]-1-Methylbenzol. Sm. 194° (*B.* 36, 3972 *C.* 1904 [1] 178).
- 5) Aethyläther d.  $\beta$ -[4-Oxyphenyl]amidoharnstoff. Sm. 190° u. Zers. (*A.* 334, 185 *C.* 1904 [2] 835).
- $C_9H_{13}O_2Br$  \*2) Bromdihydro- $\beta$ -Camphylsäure. Sm. 130° (*Soc.* 83, 866 *Ann. C.* 1903 [2] 574).
- 8) isom. Bromdihydro- $\beta$ -Camphylsäure. Sm. 137—138° (*Soc.* 83, 866 *C.* 1903 [2] 574).
- $C_9H_{13}O_3N$  20) 4-Tri[Oxymethyl]methylpyridin (4-tert. Trioxybutylpyridin). Sm. 156 bis 157°. HCl (*B.* 36, 2909 *C.* 1903 [2] 890).
- 21) Adrenalin (Suprarenin; Epinephrinhydrat). Sm. 206—207° (*C.* 1901 [2] 1354; 1903 [1] 1156; *J.* 36, 1530; *M.* 24, 263 *C.* 1903 [2] 302; *C. r.* 135, 1142 *C.* 1903 [1] 274; *B.* 36, 2944 *C.* 1903 [2] 895; *Soc.* 75, 192 *C.* 1904 [1] 816, 957; *B.* 37, 1388 *C.* 1904 [1] 1526; *B.* 37, 2022 *C.* 1904 [2] 239; *C. r.* 139, 502 *C.* 1904 [2] 1156; *C.* 1904 [2] 1512, 1575; *B.* 37, 4149 *C.* 1904 [2] 1743). — \*III, 666.
- 22) Tropinon-O-Carbonsäure. Na (*B.* 34, 1458; *A.* 326, 51 *C.* 1903 [1] 841). — \*III, 610.
- $C_9H_{13}O_3Cl$  1) Aethylester d.  $\alpha$ -Chlor- $\delta$ -Keto- $\beta$ -Methyl- $\beta$ -Penten- $\gamma$ -Carbonsäure. Sd. 120°<sub>19-20</sub> (*C.* 1904 [1] 956).
- 2) Aethylester d. 2-Chlormethyl-5-Methyl-2,3-Dihydrofuran-4-Carbonsäure. Sm. 57—58°; Sd. 141—143°<sub>17</sub> (*C. r.* 137, 12 *C.* 1903 [2] 507).
- $C_9H_{13}O_4N$  10) Aethyläther d. Verb.  $C_7H_9O_4N$ . Sm. 80° (*G.* 34 [1] 466 *C.* 1904 [2] 537).
- 11) Verbindung (aus Dimethylamin u. 2,4-Dioxybenzol-1-Carbonsäureäthylester). Sm. 95° (D.R.P. 141101 *C.* 1903 [1] 1058).
- $C_9H_{13}O_4N_5$  2) 2,4-Dinitro-1,3,5-Tri[Methylamido]benzol. Sm. 220° (*R.* 23, 129 *C.* 1904 [2] 201).
- $C_9H_{13}O_4Br$  7)  $\delta\zeta$ -Lakton d.  $\delta$ -Oxy- $\beta$ -Methylhexan- $\epsilon\zeta$ -Dicarbonsäure. Sm. 144—145° u. Zers. (*A.* 331, 146 *C.* 1904 [1] 933).
- $C_9H_{13}O_4P$  2) Dimethylester d.  $\alpha$ -Oxybenzylphosphinsäure. Sm. 99° (*C. r.* 135, 1119 *C.* 1903 [1] 285).
- 3) Dimethyl-*p*-Methylphenylester d. Phosphorsäure (D.R.P. 142971 *C.* 1903 [2] 171).
- $C_9H_{13}O_6N$  2)  $\gamma$ -Oximido- $\delta$ -Ketoheptan- $\alpha\eta$ -Dicarbonsäure. Sm. 133—136° u. Zers. (*B.* 37, 3826 *C.* 1904 [2] 1607).
- $C_9H_{13}O_6Br$  1) Trimethylester d.  $\beta$ -Brompropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 98—99° (*B.* 36, 3292 *C.* 1903 [2] 1167).
- $C_9H_{13}O_6N_3$  C 35,2 — H 4,2 — O 46,9 — N 13,7 — M. G. 307.
- 1) Trimethyläther d. Nitrotrioxydichinolnitrosäure. Na<sub>2</sub> (*Am.* 29, 117 *C.* 1903 [1] 709).
- $C_9H_{13}NJ_2$  1) Jodäthylat d. 4-Jod-2,6-Dimethylpyridin. Sm. 239—240° (*A.* 331, 256 *C.* 1904 [1] 1223).
- $C_9H_{13}NS$  2) 4-Thiocarbonyl-2,6-Dimethyl-1-Aethyl-1,4-Dihdropyridin. Sm. 248° (*A.* 331, 258 *C.* 1904 [1] 1223).
- $C_9H_{13}NSe$  1) 4-Selenocarbonyl-2,6-Dimethyl-1-Aethyl-1,4-Dihdropyridin. Sm. 254° (*A.* 331, 263 *C.* 1904 [1] 1223).
- $C_9H_{13}N_3S$  \*4) Methyläther d.  $\alpha$ -[ $\alpha$ -Methylhydrazido]- $\alpha$ -Phenylimido- $\alpha$ -Merkapto-methan. Sm. 132° (*B.* 37, 2322 *C.* 1904 [2] 312).
- 8) 4-Dimethylamidophenylthioharnstoff. Sm. 180—181° (*C.* 1903 [1] 1253).
- 9)  $\alpha$ -Amido- $\beta$ -Methyl- $\alpha$ -Benzylthioharnstoff. Sm. 129° (*B.* 37, 2327 *C.* 1904 [2] 313).
- 10) Methyläther d.  $\alpha$ -[ $\alpha$ -Phenylhydrazido]- $\alpha$ -Methylimido- $\alpha$ -Merkapto-methan. Fl. (*B.* 37, 2331 *C.* 1904 [2] 314).
- $C_9H_{14}O_2N_2$  \*7) Nitrosodihydrolauroilaktam. Sm. 138—139° (*Am.* 32, 288 *C.* 1904 [2] 1222).
- 10) Anhydrid d. *i*-Nitrosamidolauronsäure. Sm. 138° (*Am.* 28, 485 *C.* 1903 [1] 329).
- 11) Nitril d.  $\alpha$ -Oxyessig-[ $\beta$ -Cyan- $\alpha$ -Aethoxybutyl]äthersäure. Sm. 115° (*C.* 1904 [1] 160).

- $C_9H_{14}O_2N_2$  12) Aethylester d. 1-Amido-2,5-Dimethylpyrrol-3-Carbonsäure. Sm. 87—88° (*B.* 37, 2191 *C.* 1904 [2] 240).
- 13) Aethylester d. 3,6-Dimethyl-4,5-Dihydro-1,2-Diazin-4-Carbonsäure. Sm. 108—109° (108—110°); Sd. 245—248° (*B.* 35, 4313 *C.* 1903 [1] 335; *B.* 36, 502 *C.* 1903 [1] 654; *B.* 37, 2186 *C.* 1904 [2] 239).
- 14) Verbindung (aus d. Säure  $C_{10}H_{14}O_4N_2$ ). =  $(C_9H_{14}O_2N_2)_x$  (*C.* 1904 [1] 159).
- $C_9H_{14}O_2Br_2$  \*4) Dibromid d. cis-trans-Campholytischen Säure (i-Dibromdihydro- $\alpha$ -Campholytsäure). Sm. 111—116° (*Soc.* 83, 854 *C.* 1903 [2] 572).
- 9) Dibromtetrahydro- $\alpha$ -Camphylsäure. Sm. 156° (*Soc.* 83, 851 *C.* 1903 [2] 572).
- $C_9H_{14}O_6N_2$  6) 2,4,6-Triketo-5-Aethyl-5-Propylhexahydro-1,3-Diazin. Sm. 146° (*D.R.P.* 146496 *C.* 1903 [2] 1484; *A.* 335, 346 *C.* 1904 [2] 1381).
- 7) 2,4,6-Triketo-1-Methyl-5,5-Diäthylhexahydro-1,3-Diazin. Sm. 154,5° (*D.R.P.* 146496 *C.* 1903 [2] 1484; *A.* 335, 348 *C.* 1904 [2] 1381).
- $C_9H_{14}O_8N_4$  4) 5-Formylamido-6-Amido-2,4-Diketo-1,3-Diäthyl-1,2,3,4-Tetrahydro-1,3-Diazin. Sm. 235° (*C.* 1904 [2] 1497).
- $C_9H_{14}O_4N_2$  4) 2,6-Dioximidohexahydrobenzol-1-Propionsäure. Sm. 203—206° (*B.* 37, 3824 *C.* 1904 [2] 1607).
- $C_9H_{14}O_4Br_2$  8)  $\delta\delta$ -Dibrom- $\beta$ -Methylhexan- $\epsilon\zeta$ -Dicarbonsäure. Sm. 168—171° u. Zers. (*A.* 331, 145 *C.* 1904 [1] 933).
- $C_9H_{14}O_6S$  \*3) Sulfocamphylsäure (*Soc.* 83, 835 *C.* 1903 [2] 571).
- $C_9H_{14}O_7N_4$  2) Carboxylamidoacetylamidoacetylamidocacetylamidocacetylaminoglycylglycincarbonsäure. Sm. 235° (*B.* 36, 502 *C.* 1903 [1] 1304).
- $C_9H_{14}O_{12}N_4$  C 29,2 — H 3,8 — O 51,9 — N 15,1 — M. G. 370.
- 1) Säure (aus d. Verb.  $C_9H_{16}O_9N_4$ ). Sm. 149°.  $Cu_2 + H_2O$ ,  $Ag_4$  (*B.* 36, 1510 *C.* 1903 [1] 1302).
- $C_9H_{14}NCl$  \*1) Trimethylphenylammoniumchlorid. +  $6HgCl_2$  (*J. pr.* [2] 66, 473 *C.* 1903 [1] 561).
- $C_9H_{14}NJ$  \*1) Trimethylphenylammoniumjodid. Sm. 216° (*B.* 37, 414 *C.* 1904 [1] 943).
- $C_9H_{14}NJ_9$  1) Trimethylphenylammoniumnonajodid. Sm. 69° (*J. pr.* [2] 67, 350 *C.* 1903 [1] 1297).
- $C_9H_{16}ON$  \*19) Inn. Anhydrid d. Amidodihydrolaureonsäure. Sd. 285° (*Ann.* 32, 288 *C.* 1904 [2] 1222).
- \*32) Pulegenonoxim. Sd. 237—242° (*A.* 327, 133 *C.* 1903 [1] 1412).
- 38) 5-Keto-2,2-Dimethyl-4-Isopropylidentetrahydropyrrol. Sm. 121° (*B.* 36, 3368 *C.* 1903 [2] 1186).
- 39) 5-Hexylisoxazol. Sd. 103—104°<sub>15</sub> (*C. r.* 138, 1341 *C.* 1904 [2] 187).
- 40) Piperidon (aus Pinophoron). Sd. 136—140°<sub>14</sub> (*B.* 37, 240 *C.* 1904 [1] 726).
- 41) Amid d.  $\beta\epsilon$ -Dimethyl- $\beta\delta$ -Hexadien- $\gamma$ -Carbonsäure. Sm. 59°; Sd. 142—145°<sub>14</sub> (*B.* 36, 3364 *C.* 1903 [2] 1186).
- 42) Amid d. r- $\alpha$ -Campholytsäure. Sm. 103° (*C. r.* 138, 696 *C.* 1904 [1] 1086).
- $C_9H_{16}ON_8$  3)  $\alpha$ -Semicarbazon- $\beta$ -Oktin. Sm. 90° (*C. r.* 138, 1341 *C.* 1904 [2] 187).
- 4) Semicarbazon d. Ketobicyclo[1,2,3]oktan. Sm. 189—190° (*B.* 36, 3612 *C.* 1903 [2] 1372).
- $C_9H_{16}O_2N$  \*6) Hydroecgonidin.  $HCl$ ,  $(HCl, AuCl_3 + 5H_2O)$  (*Ar.* 242, 9 *C.* 1904 [1] 731).
- \*18)  $\beta$ -Isomerochinen.  $(2HCl, PtCl_4)$ ,  $(HCl, AuCl_3)$  (*M.* 24, 307 *C.* 1903 [2] 297).
- \*19) 2,2,5,5-Tetramethyl-2,5-Dihydropyrrol-3-Carbonsäure (*B.* 36, 3371 *C.* 1903 [2] 1187).
- 25) Allomerochinen.  $HCl$ ,  $(2HCl, PtCl_4 + 3H_2O)$ ,  $(HCl, AuCl_3)$  (*M.* 23, 460). — \*III, 640.
- 26) Amid d. i-Camphononsäure. Sm. 215° (*Ann.* 28, 484 *C.* 1903 [1] 329).
- $C_9H_{16}O_2Br$  9) 2-Brom-1,1,2-Trimethyl-R-Pentamethylen-5-Carbonsäure. Sm. 108° u. Zers. (*Soc.* 85, 145 *C.* 1904 [1] 728).
- 10) i-Bromdihydro- $\alpha$ -Campholytsäure. Sm. 100° (*Soc.* 83, 854 *C.* 1903 [2] 572).
- $C_9H_{16}O_3N$  \*2) d-Ecgonin.  $HCl + \frac{1}{2}[1]H_2O$  (*A.* 326, 63 *C.* 1903 [1] 841).

- $C_9H_{15}O_3N$  \*17) r-Egonin (Pseudotropin-C-Carbonsäure). Sm. 251° u. Zers. (A. 326, 61 C. 1903 [1] 841).
- \*18) Pseudotropin-O-Carbonsäure +  $3H_2O$ . Sm. 201—202° u. Zers.  $HCl$  +  $1[2]H_2O$ , ( $HCl$ ,  $AlCl_3$ ) (A. 326, 54 C. 1903 [1] 841).
- 22) Acetylscopolin. Sm. 53°; Sd. oberh. 250° (D.R.P. 79864). — \*III, 619.
- 23) 5-Oximido-1,3-Dimethylhexahydrobenzol-1-Carbonsäure. Sm. 155 bis 156° (B. 37, 4072 C. 1904 [2] 1652).
- 24) Verbindung (aus Trimethylamin u. 1,2,3-Trioxybenzol). Sm. 160° (D.R.P. 141101 C. 1903 [1] 1058).
- $C_9H_{15}O_3N_3$  10) 5-Semicarbazon-1,1-Dimethyl-R-Pentamethylen-2-Carbonsäure. Sm. 217° (C. 1903 [1] 923; Soc. 85, 140 C. 1904 [1] 728).
- $C_9H_{15}O_5N$  6) Verbindung (aus Dimethylamin u. 3,4,5-Trioxybenzol-1-Carbonsäuremethylester). Sm. 164° (D.R.P. 141101 C. 1903 [1] 1058).
- $C_9H_{15}O_6N$  2) Triäthylester d. Stickstofftricarbonsäure. Sd. 146—147°<sub>12</sub> (B. 36, 740 C. 1903 [1] 827).
- $C_9H_{15}O_6N_3$  2) N-Aethylester d. Carboxylamidoacetylamidoacetylamidoessigsäure (Carbäthoxylglycylglycin). Sm. 212—214° (B. 36, 2100 C. 1903 [1] 1111).
- $C_9H_{15}O_6N_5$  C 37,4 — H 5,2 — O 33,2 — N 24,2 — M. G. 289.
- 1) Methylester d.  $\delta$ -Oximido- $\epsilon$ -Semicarbazidohydroxylhydrazon- $\gamma$ -Keto- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 170° u. Zers. (Soc. 83, 1256 C. 1903 [2] 1423).
- $C_9H_{15}NCl_2$  1) Verbindung (aus r- $\alpha$ -Campholytsäureamid). Sm. 175° (C. r. 138, 696 C. 1904 [1] 1086).
- $C_9H_{15}ON_2$  15) 2-Di[Dimethylamido]methylfuran. ( $2HCl$ ,  $PtCl_4$ ) (A. 335, 376 C. 1904 [2] 1406).
- 16) 5-Keto-3-Hexyl-4,5-Dihydropyrazol. Sm. 197° (C. r. 136, 755 C. 1903 [1] 1019).
- 17) 5-Keto-3-Methyl-4-Amyl-4,5-Dihydropyrazol. Sm. 186—187° (Bl. [3] 31, 761 C. 1904 [2] 343).
- 18) 5-Keto-4-Methyl-3-Amyl-4,5-Dihydropyrazol. Sm. 164—165° (Bl. [3] 31, 596 C. 1904 [2] 26).
- 19) 5-Keto-3-Methyl-4-Isoamyl-4,5-Dihydropyrazol. Sm. 217—218° (Bl. [3] 31, 761 C. 1904 [2] 343).
- 20) 5-Keto-4-Methyl-3-Isoamyl-4,5-Dihydropyrazol. Sm. 177—178° (Bl. [3] 31, 599 C. 1904 [2] 26).
- 21) 5-Keto-4-Aethyl-3-Isobutyl-4,5-Dihydropyrazol. Sm. 106° (Bl. [3] 31, 595 C. 1904 [2] 26).
- 22) 5-Keto-3,4-Dipropyl-4,5-Dihydropyrazol. Sd. 190—200°<sub>14</sub> (Bl. [3] 31, 594 C. 1904 [2] 26).
- 23) 5-Keto-3-Propyl-4-Isopropyl-4,5-Dihydropyrazol. Sm. 133° (Bl. [3] 31, 594 C. 1904 [2] 26).
- $C_9H_{15}OCl_2$  1) Dihydrochlorid d. Phoron. Fl. (B. 36, 3536 C. 1903 [2] 1368).
- $C_9H_{15}OBr_2$  2) Dihydrobromid d. Phoron. Sm. 19° (B. 36, 3536 C. 1903 [2] 1368).
- $C_9H_{15}OS_2$  1) Xanthogenat d. 2-Oxy-1-Methylhexahydrobenzol. Sd. 149—151°<sub>18</sub> (C. 1903 [2] 239).
- $C_9H_{15}O_2N_2$  11) Pseudotropylamincarbamat (B. 31, 1209). — \*III, 614.
- $C_9H_{15}O_4N_2$  3) Diäthylester d.  $\alpha$ -Isopropylidenhydrazin- $\alpha'$ - $\beta$ -Dicarbonsäure (Acetessigesterhydrazoncarbonester). Sm. 64° (P. GUTMANN, Dissert., Heidelberg 1903).
- $C_9H_{15}O_5N_2$  \*2) Diäthylester d. Carboxylamidoacetylamidoessigsäure ( $\alpha$ -Carbäthoxylglycylglycinäthylester). Sm. 87° (B. 36, 2097 C. 1903 [1] 1303; B. 36, 2110 C. 1903 [2] 345).
- 4) isom. Diäthylester d. Carboxylamidoacetylamidoessigsäure ( $\beta$ -Carbäthoxylglycylglycinäthylester). Sm. 148—150° (B. 36, 2097 C. 1903 [1] 1303).
- $C_9H_{15}O_5N_4$  2) Amid d. Carboxylamidoacetylamidoacetylamidoessigsäure - N-Aethylester (Carbäthoxyldiglycylglycinamid). Sm. 235° (B. 36, 2101 C. 1903 [1] 1304).
- $C_9H_{15}O_7N_2$  C 40,9 — H 6,1 — O 42,4 — N 10,6 — M. G. 264.
- 1) Kaseinsäure. Sm. 192°.  $Cu_2 + 3H_2O$ ,  $HCl$  (B. 37, 1597 C. 1904 [1] 1449; H. 42, 289 C. 1904 [2] 958).
- $C_9H_{15}O_7S$  1) Aethylidenmalonäthylesterhydrosulfonsäure. K, Ba (B. 37, 4057 C. 1904 [2] 1649).

- $C_9H_{16}O_9N_4$  C 33,3 — H 4,9 — O 44,4 — N 17,3 — M. G. 324.  
 1) Säure (aus d. Verb.  $C_{17}H_{40}O_{13}N_4$ ). Sm. 229°. 4HCl, Cu + 2H<sub>2</sub>O (B. 36, 1509 C. 1903 [1] 1302).
- $C_9H_{16}NCl$  6) 1-Chlor-3-Dimethylamido-2,3,4,5-Tetrahydro-R-Hepten. (2HCl, PtCl<sub>4</sub>) (A. 326, 10 C. 1903 [1] 778).
- $C_9H_{16}NJ$  \*2) Jodmethylat d. Tropidin. Sm. noch nicht bei 300° (A. 326, 20 C. 1903 [1] 778).
- $C_9H_{17}ON$  \*4) 5-Oximido-1,1,3-Trimethylhexahydrobenzol. Sm. 84—85° (C. 1904 [2] 653).  
 \*11)  $\alpha$ -Methyltropin (3-Dimethylamido-1-Oxy-2,3,4,5-Tetrahydro-R-Hepten). Sd. 247—248°. (HCl, AuCl<sub>3</sub>) (A. 326, 9 C. 1903 [1] 778).  
 \*23) 4-Oximido-1,1,3-Trimethylhexahydrobenzol. Sm. 108—109° (C. 1904 [2] 653).  
 \*24)  $\alpha$ -Isooxim d. 4-Keto-1,1,3-Trimethylhexahydrobenzol. Sm. 115 bis 116° (C. 1904 [2] 654).  
 \*26) 2-Oximido-1,1,4-Trimethylhexahydrobenzol (Pulenonoxim). Sm. 94 bis 95°; Sd. 117°<sub>12</sub> (A. 329, 100 C. 1903 [2] 1071).  
 \*27) Pulenonisoxxim. Sm. 96—97°; Sd. 145—150°<sub>27</sub> (A. 329, 100 C. 1903 [2] 1071).  
 33)  $\beta$ -Isooxim d. 4-Keto-1,1,3-Trimethylhexahydrobenzol. Sm. 106 bis 108° (C. 1904 [2] 654).  
 34)  $\alpha$ -Isooxim d. 5-Keto-1,1,3-Trimethylhexahydrobenzol. Sm. 111 bis 112° (C. 1904 [2] 654).  
 35)  $\beta$ -Isooxim d. 5-Keto-1,1,3-Trimethylhexahydrobenzol. Sm. 82—84° (C. 1904 [2] 654).  
 36) 2-Oximido-1-Methyl-3-Isopropyl-R-Pentamethylen. Sm. 79° (B. 37, 238 C. 1904 [1] 726).  
 37) Pseudomethyltropin. Sd. 242—244° (A. 326, 15 C. 1903 [1] 778).  
 38) Nitril d.  $\gamma$ -Oxybuteramyläthersäure. Sd. 108—110°<sub>12</sub> (C. r. 136, 96 C. 1903 [1] 455).
- $C_9H_{17}ON_3$  15)  $\alpha$ -Semicarbazon- $\alpha$ -Hexahydrophenyläthan. Sm. 175° (Bl. [3] 29, 1051 C. 1903 [2] 1437).  
 16) 3-Semicarbazonmethyl-1-Methylhexahydrobenzol. Sm. 158—159° (B. 37, 852 C. 1904 [1] 1146).  
 17) 5-Semicarbazon-1,1,2-Trimethyl-R-Pentamethylen. Sm. 210—212° (C. r. 136, 1143 C. 1903 [1] 1410).  
 18) 2-Semicarbazon-1,1,3-Trimethyl-R-Pentamethylen. Sm. 150—151° (A. 329, 94 C. 1903 [2] 1071).
- $C_9H_{17}O_3N$  24)  $\gamma$ -Oximido- $\delta$ -Ketononan. Sm. 33—34; Sd. 131—132° (Bl. [3] 31, 1168 C. 1904 [2] 1701).  
 25) 3-Acetyl-4,4,6-Trimethyltetrahydro-1,3-Oxazin. Sd. 235—237°. (HCl, AuCl<sub>3</sub>) (M. 25, 832 C. 1904 [2] 1239).  
 26) 2,2,5,5-Tetramethyltetrahydropyrrol-3-Carbonsäure + H<sub>2</sub>O. Sm. 220° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>) (B. 36, 3359 C. 1903 [2] 1185).  
 27) Säure (aus Pinophoronpiperidon). Sm. 204—206° (B. 37, 240 C. 1904 [1] 726).  
 28) Gem. Imid d. Buttersäure u. Isovaleriansäure. Sm. 88° (C. r. 137, 326 C. 1903 [2] 712).  
 29) Gem. Imid d. Isobuttersäure u. Valeriansäure. Sm. 84° (C. r. 137, 326 C. 1903 [2] 712).  
 30) Gem. Imid d. Isobuttersäure u. Isovaleriansäure. Sm. 94° (C. r. 137, 326 C. 1903 [2] 712).
- $C_9H_{17}O_2N_3$  5) Di[Methylamid] d. 1-Methyltetrahydropyrrol-2-Carbonsäure. Sm. 122,5—123° (A. 326, 109 C. 1903 [1] 843).
- $C_9H_{17}O_2Br$  8)  $\alpha$ -Bromoktan- $\alpha$ -Carbonsäure. Fl. (C. r. 138, 698 C. 1904 [1] 1066).
- $C_9H_{17}O_3N$  \*2)  $\gamma$ -Oximido- $\beta$ -Methylheptan- $\zeta$ -Carbonsäure. Sm. 76—77° (75°) (A. 327, 142 C. 1903 [1] 1412; B. 37, 238 C. 1904 [1] 726).  
 \*10) Aethylester d.  $\epsilon$ -Oximido- $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. Sd. 156°<sub>16</sub> (Bl. [3] 31, 1074 C. 1904 [2] 1457).  
 12) Isobutylester d.  $\alpha$ -Oximidovaleriansäure. Sm. 16°; Sd. 152°<sub>15</sub> (Bl. [3] 31, 1072 C. 1904 [2] 1457).
- $C_9H_{17}O_3N_3$  4)  $\epsilon$ -Semicarbazon- $\beta$ -Methylhexan- $\beta$ -Carbonsäure. Sm. 163° (A. 329, 93 C. 1903 [2] 1071).

- $C_9H_{17}O_3N_3$  5) Aethylester d.  $\delta$ -Semicarbazon- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 158—159° (*Bl.* [3] 31, 1151 *C.* 1904 [2] 1707).  
6)  $\beta\beta$ -Dimethylpropylester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 168° (*C. r.* 138, 985 *C.* 1904 [1] 1398).  
7)  $\beta$ -Methylbutylester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 151,5° (*M.* 25, 1098 *C.* 1904 [2] 1698).
- $C_9H_{17}NBr_2$  \*4) Brommethylat d. Bromtropan (*A.* 326, 35 *C.* 1903 [1] 779).
- $C_9H_{19}O_2N_2$  18)  $\gamma\delta$ -Dioximidononan. Sm. 158—158,5° (*Bl.* [3] 31, 1168 *C.* 1904 [2] 1701).  
19) Dipropylacetylharnstoff. Sm. 192,5° (*A.* 335, 367 *C.* 1904 [2] 1382).  
20) Ureid d. Dipropylelessigsäure (Dipropylacetylharnstoff). Sm. 192,5° (*D. R. P.* 144431 *C.* 1903 [2] 813).
- $C_9H_{19}O_3N_2$  3) Base (aus Methylvaleriansäure). Sm. 47°; Sd. 120°. (2HCl, PtCl<sub>4</sub>) (*B.* 36, 215 *C.* 1904 [2] 1648).  
4)  $r\text{-}\alpha$ -[ $\alpha$ -Amidoisocapronyl]amidopropionsäure (*r*-Leucylalanin). Sm. 245° u. Zers. (*B.* 37, 3105 *C.* 1904 [2] 1210).  
5) Aethylester d.  $r\text{-}\alpha$ -Ureido- $\gamma$ -Methylvaleriansäure. Sm. 92—93° (*Bl.* [3] 31, 1181 *C.* 1904 [2] 1710).
- $C_9H_{19}O_4N_2$  \*1)  $\alpha\alpha$ -Dinitrononan. K (*J. pr.* [2] 67, 139 *C.* 1903 [1] 865; *G.* 33 [1] 416 *C.* 1903 [2] 551; *G.* 34 [2] 54 *C.* 1904 [2] 693).
- $C_9H_{19}O_6N_2$  3) Dimethylglykoseureid. Sm. 157° u. Zers. (*R.* 22, 65 *C.* 1903 [1] 1081).
- $C_9H_{19}O_7S_2$  2) Phoronhydrodisulfonsäure.  $Na_2 + 2\frac{1}{2}H_2O$ ,  $Ba + 4H_2O$  (*B.* 37, 4047 *C.* 1904 [2] 1648).
- $C_9H_{19}NJ$  4) Jodmethylat d. *i*- $\epsilon$ -Conicein. Sm. 185—186° (*B.* 37, 1891 *C.* 1904 [2] 238).
- $C_9H_{19}ON$  \*19) Amid d. Oktan- $\alpha$ -Carbonsäure. Sm. 98—99° (*B.* 36, 2549 *C.* 1903 [2] 654).  
\*29) 4-Dimethylamido-1-Oxy-*R*-Heptamethylen. Sd. 251° (*A.* 326, 7 *C.* 1903 [1] 777).  
34)  $\beta$ -Oximido- $\delta$ -Methyloktan. Fl. (*Soc.* 81, 1595 *C.* 1903 [1] 16, 132).  
35) 4,4,6-Trimethyl-3-Aethyltetrahydro-1,3-Oxazin. Sd. 176—180°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*M.* 25, 843 *C.* 1904 [2] 1240).  
36) Dipropylamid d. Propionsäure. Sd. 227° (*B.* 36, 3526 *C.* 1903 [2] 1326).  
37) Diisobutylamid d. Ameisensäure. Sd. 109—110°<sub>15</sub> (*B.* 36, 2476 *C.* 1903 [2] 559).
- $C_9H_{19}ON_3$  2)  $\alpha$ -Semicarbazonoktan. Sm. 101° (*C. r.* 138, 699 *C.* 1904 [1] 1066).  
3)  $\beta$ -Semicarbazonoktan. Sm. 121° (122—123°) (*C. r.* 136, 755 *C.* 1903 [1] 1019; *Bl.* [3] 31, 1157 *C.* 1904 [2] 1707).  
4)  $\gamma$ -Semicarbazonoktan. Sm. 117—117,5° (*Bl.* [3] 31, 1158 *C.* 1904 [2] 1707).  
5)  $\delta$ -Semicarbazon- $\beta$ -Methylheptan. Sm. 124° (*Bl.* [3] 31, 1157 *C.* 1904 [2] 1707).  
6)  $\epsilon$ -Semicarbazon- $\beta$ -Methylheptan. Sm. 132—133° (*Bl.* [3] 31, 1158 *C.* 1904 [2] 1708).  
7)  $\delta$ -Semicarbazonmethylheptan. Sm. 100—101° (*Bl.* [3] 31, 306 *C.* 1904 [1] 1133).  
8) 5-Semicarbazon-4-Isopropyl-1-Methyl-*R*-Pentamethylen. Sm. 203 bis 204° (*C.* 1904 [2] 1045).
- $C_9H_{19}OBr$  1) Amylätber d.  $\delta$ -Brom- $\alpha$ -Oxybutan. Sd. 114—115°<sub>18</sub> (*C. r.* 138, 976 *C.* 1904 [1] 1400).
- $C_9H_{19}OJ$  1) Amylätber d.  $\delta$ -Jod- $\alpha$ -Oxybutan. Sd. 128—129°<sub>18</sub> (*C. r.* 138, 976 *C.* 1904 [1] 1400).
- $C_9H_{19}O_2N$  8) Betain d.  $\alpha$ -Triäthylamidopropionsäure. Sm. 90—92°. (HCl, AuCl<sub>3</sub>) (*B.* 36, 4192 *C.* 1904 [1] 263).  
9) Aethylester d.  $\beta$ -Diäthylamidopropionsäure. Sd. 192°<sub>758</sub> (*J. pr.* [2] 68, 347 *C.* 1903 [2] 1318).  
10) Aethylester d. Dipropylamidoameisensäure. Sd. 97°<sub>20</sub> (*B.* 36, 2287 *C.* 1903 [2] 563).
- $C_9H_{19}O_3Br$  \*1) Triäthylätber d.  $\beta$ -Brom- $\alpha\alpha\gamma$ -Trioxypropan (*B.* 36, 3670 *C.* 1903 [2] 1313).
- $C_9H_{19}N_2J$  1) Nitril d.  $\alpha$ -Triäthyljodammoniumpropionsäure. Sm. 178—179° u. Zers. (*B.* 36, 4191 *C.* 1904 [1] 263).

- $C_9H_{20}ON_2$  11)  $\alpha$ -norm. Butyl- $\beta$ -[d-sec. Butyl]harnstoff. Sm. 47° (*Ar.* 242, 70 *C.* 1904 [1] 999).  
 12)  $\alpha$ -[r-sec. Butyl]- $\beta$ -[d-sec. Butyl]harnstoff. Sm. 132° (*Ar.* 242, 71 *C.* 1904 [1] 999).  
 $C_9H_{20}O_3N_2$  \*1) Triacetondihydroxylamin. Sm. 112—114° (*B.* 36, 657 *Ann. C.* 1903 [1] 762).  
 $C_9H_{21}O_3B$  \*2) Triisopropylester d. Borsäure. Sd. 140° (*B.* 36, 2221 *C.* 1903 [2] 420).  
 $C_9H_{20}N_2S$  \*8) s-rd-Di[sec. Butyl]thioharnstoff. Sm. 113° (*Ar.* 242, 60 *C.* 1904 [1] 998).  
 9)  $\alpha$ -[norm. Butyl]- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 32° (*Ar.* 242, 60 *C.* 1904 [1] 998).  
 10)  $\alpha$ -[d-sec. Butyl]- $\beta$ -[tert. Butyl]thioharnstoff. Sm. 132° (*Ar.* 242, 60 *C.* 1904 [1] 998).  
 11)  $\alpha$ -Isobutyl- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 51° (*Ar.* 242, 60 *C.* 1904 [1] 998).  
 12)  $\alpha\alpha$ -Diäthyl- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 60—60,5° (*Ar.* 242, 61 *C.* 1904 [1] 998).  
 $C_9H_{21}ClS$  \*1) Methyläthyl-sec. Hexylsulfinchlorid (*J. pr.* [2] 66, 460 *C.* 1903 [1] 561).  
 \*2) Methyl-diisobutylsulfinchlorid. +  $4HgCl_2$  (*J. pr.* [2] 66, 463 *C.* 1903 [1] 561).  
 $C_9H_{25}O_2N$  2) Methylhydroxyd d.  $\beta$ -Dimethylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. (2 Chlorid +  $AuCl_3$ ), Pikrat (*M.* 25, 145 *C.* 1904 [1] 866).  
 $C_9H_{24}N_2Cl_2$  \*1) Hexamethyltrimethylendiammoniumchlorid. +  $2HgCl_2$  (*J. pr.* [2] 66, 519 *C.* 1903 [1] 561).  
 $C_9H_{24}N_2J_6$  1) Hexamethyltrimethylendiammoniumtrijodid. Sm. 205° (*J. pr.* [2] 67, 352 *C.* 1903 [1] 1298).  
 $C_9H_{24}N_2J_{10}$  1) Hexamethyltrimethylendiammoniumpentajodid. Sm. 150° (*J. pr.* [2] 67, 352 *C.* 1903 [1] 1297).  
 $C_9H_{24}N_2J_{18}$  1) Hexamethyltrimethylendiammoniumenneajodid. Sm. 100° (*J. pr.* [2] 67, 352 *C.* 1903 [1] 1297).

## — 9 IV —

- $C_9H_4O_6N_3Cl_3$  \*1) p-Dinitro-2-[ $\beta\beta\beta$ -Trichloräthyliden]amidobenzol-1-Carbonsäure. Sm. 187° (*B.* 35, 3899 *C.* 1903 [1] 20).  
 $C_9H_5ONBr_2$  4) s,p-Dibrom-2-Oxychinolin. Sm. 188° (*J. pr.* [2] 68, 102 *C.* 1903 [2] 445).  
 $C_9H_5O_2NCl_2$  4) Nitril d. 3,5-Dichlor-2-Acetoxybenzol-1-Carbonsäure. Sm. 78° (*B.* 37, 4029 *C.* 1904 [2] 1718).  
 $C_9H_5O_2N_2Cl$  12) 2-Chlor-8-Nitrochinolin. Sm. 152° (*J. pr.* [2] 68, 101 *C.* 1903 [2] 444).  
 $C_9H_5O_2N_2Br_3$  1) p-Tribrom-3-Nitro-2-Methylindol. Sm. 290° u. Zers. (*C.* 34 [2] 63 *C.* 1904 [2] 710).  
 $C_9H_5ONCl$  17) Nitril d.  $\beta$ -Oxy- $\alpha$ -[4-Chlorphenyl]akrylsäure. Sm. 159—161° (*J. pr.* [2] 67, 393 *C.* 1903 [1] 1357).  
 $C_9H_5ON_2Br_2$  2) p,p-Dibrom-4-Keto-2-Nitro-1,3,4-Dihydro-1,3-Benzodiazin. Zers. 1903.  
 $C_9H_5O_2NCl$  \*2) Nitril d. 5-Chlor-2-Acetoxybenzol-1-Carbonsäure. Sm. 79—80° (*B.* 37, 4026 *C.* 1904 [2] 1717).  
 4) Nitril d. 3-Chlor-4-Acetoxybenzol-1-Carbonsäure. Sm. 89—90° (*B.* 37, 4034 *C.* 1904 [2] 1719).  
 $C_9H_5O_2N_2Cl_2$  1) p-Dichlor-2-Cyanmethylamidobenzol-1-Carbonsäure. Sm. 222 bis 223° (*D.R.P.* 148615 *C.* 1904 [1] 1046).  
 $C_9H_5O_2N_2S$  3) 5-Phenyl-1,2,3-Thiodiazol-4-Carbonsäure. Sm. 157° u. Zers. (*A.* 333, 5 *C.* 1904 [2] 780).  
 $C_9H_5O_3N_3Cl$  3) 2-[4-Chlorphenyl]-1,2,3,6-Oxtriazin-5-Carbonsäure. Sm. 145° u. Zers. (*Soc.* 83, 1249 *C.* 1903 [2] 1422).  
 $C_9H_5O_6N_3Cl$  1) Nitril d. 5-Chlor-3,6-Dinitro-2-Oxybenzoläthyläther-1-Carbonsäure. Sm. 65° (*R.* 21, 426 *C.* 1903 [1] 511).  
 $C_9H_5N_2Br_2S$  1) 6,8-Dibrom-4-Thiocarbonyl-2-Methyl-3,4-Dihydro-1,3-Benzodiazin. Sm. noch nicht bei 290° (*C.* 1903 [2] 1195).  
 $C_9H_7ONS_2$  \*1) 2-Thiocarbonyl-4-Keto-3-Phenyltetrahydrothiazol. Sm. 192 bis 193° (*M.* 24, 500 *C.* 1903 [2] 836).

- $C_9H_7ON_2Cl_3$  2) Nitril d. 3- $[\beta\beta\beta$ -Trichlor- $\alpha$ -Oxyäthyl]amidobenzol-1-Carbonsäure. Sm. 102—103° u. Zers. (C. 1904 [2] 103).  
 $C_9H_7ON_2Br$  2) Nitril d. 4-Brombenzoylamidoessigsäure. Sm. 174° (B. 36, 1646 C. 1903 [2] 32).  
 $C_9H_7ON_3S_2$  2) Phenylamid d. Isorhodanformylthioameisensäure. Sm. 172° (Soc. 83, 89 C. 1903 [1] 230, 447).  
 $C_9H_7OClBr_2$  2) Aldehyd d.  $\alpha$ -Chlor- $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Fl. (C. r. 136, 1073 C. 1903 [1] 1345).  
 $C_9H_7O_2NBr_2$  2) 4, 6-Dibrom-5-Oxy-1, 3-Dimethylbenzoxazol. Sm. 221—222° (B. 37, 1427 C. 1904 [1] 1418).  
 $C_9H_7O_2N_2Cl$  3)  $\beta$ -Chlor-2-Cyanmethyramidobenzol-1-Carbonsäure. Sm. 199—200° (D.R.P. 148615 C. 1904 [1] 1045).  
 $C_9H_7O_2N_2Br$  5)  $\beta$ -Brom-2-Cyanmethyramidobenzol-1-Carbonsäure. Sm. 209—210° (D.R.P. 148615 C. 1904 [1] 1045).  
 $C_9H_7O_2ClBr_2$  \*1)  $\alpha$ -Chlor- $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Sm. 138° (C. r. 136, 1073 C. 1903 [1] 1345).  
 $C_9H_7O_3N_2Cl$  \*4) Nitril d. 5-Chlor-6-Nitro-2-Oxybenzoläthyläther-1-Carbonsäure (R. 21, 426 C. 1903 [1] 511).  
 $C_9H_7O_3N_2Cl_3$  2) Dimethylamid d. 2, 4, 6-Trichlor-3-Nitrobenzol-1-Carbonsäure. Sm. 111,25° (R. 21, 392 C. 1903 [1] 152).  
 $C_9H_7O_4NCl_2$  3) 2, 5, 6-Trichlor-4-Nitro-3-Methylphenylamid d. Essigsäure. Sm. noch nicht bei 200° (Soc. 83, 334 C. 1903 [1] 870).  
 $C_9H_7O_5NCl_2$  1)  $\beta$ -Dichlorphenylamidoessigsäure-2-Carbonsäure. Sm. 237—238° (D.R.P. 148615 C. 1904 [1] 1045).  
 $C_9H_7NBrJ$  1) Aethyl-4, 6-Dichlor-2-Nitrophenylester d. Kohlensäure. Sm. 38—39° (Am. 32, 30 C. 1904 [2] 697).  
 $C_9H_7N_4S_3P$  1) Chinolinbromojodid. Sm. 138—140° (C. r. 136, 1471 C. 1903 [2] 296).  
 $C_9H_8ONCl$  1) Phosphortrithiocyanat + Anilin. Sm. 116—117° (Soc. 85, 358 C. 1904 [1] 1407).  
 $C_9H_8ONCl_3$  3) 2-Chlorbenzimidomethyläther. HCl (Soc. 83, 768 C. 1903 [2] 200, 437).  
 $C_9H_8ON_2S$  13) 4-Methylphenylamid d. Trichloressigsäure. Sm. 113° (A. 332, 264 C. 1904 [2] 699).  
 $C_9H_8ON_2Se$  8) 1-Acetylamidobenzthiazol. Sm. 186—187° (A. 212, 329; B. 36, 3136 C. 1903 [2] 1071). — IV, 682.  
 $C_9H_8OClBr$  1) Phenylamid d. Selenocyanessigsäure. Sm. 129° (Ar. 241, 200 C. 1903 [2] 103).  
 $C_9H_8O_2NCl$  2) Chlorid d.  $\alpha$ -Brom- $\beta$ -Phenylpropionsäure. Sd. 132—133°<sub>12</sub> (B. 37, 3065 C. 1904 [2] 1207).  
 $C_9H_8ONCl_3$  3) Aldehyd d. 6-Chlor-3-Acetylamidobenzol-1-Carbonsäure. Sm. 163—164° (M. 25, 368 C. 1904 [2] 322).  
 $C_9H_8O_2N_4Cl_4$  3)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Oxyäthyläther d. anti-Benzaldoxim (Chloralbenzaldoxim). Sm. 62° (D.R.P. 66877). — \*III, 34.  
 $C_9H_8O_3NCl$  1) 2, 6-Diketo-7-Chlormethyl-8-Trichlormethyl-1, 3-Dimethylpurin. Sm. 204—205° (D.R.P. 146715 C. 1903 [2] 1485).  
 $C_9H_8O_3NBr$  \*5) 3-Chlorbenzoylamidoessigsäure (C. 1903 [1] 412).  
 $C_9H_8O_3N_2Cl_2$  14) 2-Chlorbenzoylamidoessigsäure. Fl. Ca (C. 1903 [1] 412).  
 $C_9H_8O_3N_3Cl$  15) 4-Chlorbenzoylamidoessigsäure + H<sub>2</sub>O. Sm. 143° (C. 1903 [1] 412).  
 $C_9H_8O_3N_4$  \*2) 4-Brombenzoylamidoessigsäure. Sm. 162° (B. 36, 1647 C. 1903 [2] 32).  
 $C_9H_8O_3N_5$  7) 2-Brombenzoylamidoessigsäure + H<sub>2</sub>O. Sm. 153° (C. 1903 [1] 412).  
 $C_9H_8O_3N_6$  8) 3-Brombenzoylamidoessigsäure + H<sub>2</sub>O. Sm. 183° (C. 1903 [1] 412).  
 $C_9H_8O_3N_7$  9) Aethylester d. 4-Brom-2-Nitrosobenzol-1-Carbonsäure. Sm. 155° (B. 37, 1872 C. 1904 [1] 1601).  
 $C_9H_8O_3N_8$  \*3) 3-Jodbenzoylamidoessigsäure (H. 37, 436 C. 1903 [1] 1150).  
 $C_9H_8O_3N_9$  3) 2-Jodbenzoylamidoessigsäure. Ba (H. 37, 435 C. 1903 [1] 1150).  
 $C_9H_8O_3N_2Cl_2$  1)  $\beta$ -Dichlor-4-Nitro-3-Methylphenylamid d. Essigsäure. Sm. 181—183° (Soc. 83, 334 C. 1903 [1] 870).  
 $C_9H_8O_3N_3Cl$  2) Nitril d. 5-Chlor-3-Nitro-6-Amido-2-Oxybenzoläthyläther-1-Carbonsäure. Sm. 157° (R. 21, 427 C. 1903 [1] 511).

- $C_9H_5O_3N_4S$  1) 1-Phenylazoimidazol-1<sup>4</sup>-Sulfonsäure. Zers. oberh. 270—280° (*B.* 37, 699 *C.* 1904 [1] 1562).
- $C_9H_5O_4NCl$  8) *p*-Chlorphenylamidoessigsäure-2-Carbonsäure. Sm. 210—215° (D.R.P. 148615 *C.* 1904 [1] 1045).
- 9) Acetat d. 5-Chlor-3-Nitro-4-Oxy-1-Methylbenzol. Sm. 95° (*A.* 328, 312 *C.* 1903 [2] 1246).
- $C_9H_5O_4NBr$  14) *p*-Bromphenylamidoessigsäure-2-Carbonsäure. Sm. 228° (D.R.P. 148615 *C.* 1904 [1] 1045).
- $C_9H_5O_4N_2S$  1) O-Methyläther d. 3-Nitrobenzoylimidomerkaptooxymethan. Sm. 120° (*C.* 1904 [1] 1559).
- $C_9H_5O_5NCl$  8) Aethyl-4-Chlor-2-Nitrophenylester d. Kohlensäure. Sm. 60° (*Am.* 32, 23 *C.* 1904 [2] 696).
- 9) Aethyl-6-Chlor-2-Nitrophenylester d. Kohlensäure. Fl. (*Am.* 32, 26 *C.* 1904 [2] 696).
- $C_9H_5O_5NBr$  4) Aethyl-4-Brom-2-Nitrophenylester d. Kohlensäure. Sm. 76° (*Am.* 32, 28 *C.* 1904 [2] 697).
- $C_9H_5O_5N_2Br_2$  2) Methyläther d.  $\beta\beta$ -Dibrom- $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha$ -[4-Nitrophenyl]-äthan. Sm. 160—160,5° (*A.* 325, 16 *C.* 1903 [1] 287).
- $C_9H_5O_5Br_2S$  1)  $\alpha\beta$ -Dibrom- $\beta$ -[4-Sulfohenyl]propionsäure + 2H<sub>2</sub>O. Na + 3H<sub>2</sub>O, Na<sub>2</sub> + 4H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Cu + 2H<sub>2</sub>O, Anilinsalz, Dimethyl-anilinsalz, Diäthylanilinsalz (*C.* 1903 [2] 438).
- $C_9H_5O_6NBr$  1) Aethylcarbonat d. 5-[oder 6]-Brom-4-Nitro-1, 2, 3-Trioxybenzol. Sm. 172° (*B.* 37, 114 *C.* 1904 [1] 585).
- $C_9H_5ONS_2$  \*1) Methyl ester d. Benzoylamidodithioameisensäure. Sm. 135° (*Bl.* [3] 29, 51 *C.* 1903 [1] 446).
- $C_9H_5ON_3S$  \*5) 3-Merkapto-5-Keto-4-Methyl-1-Phenyl-4, 5-Dihydro-1, 2, 4-Triazol. Sm. 203°. Ag (*B.* 37, 624 *C.* 1904 [1] 957; *B.* 37, 2337 *C.* 1904 [2] 315).
- 8) Methyläther d. 3-Merkapto-5-Keto-1-Phenyl-4, 5-Dihydro-1, 2, 4-Triazol. Sm. 178° (*B.* 36, 3152 *C.* 1903 [2] 1074).
- 9) Amid d. Benzoylmethylazothiocarbonsäure. Sm. 170° (*B.* 36, 4127 *C.* 1904 [1] 295).
- $C_9H_5O_2NBr_2$  3) Methyläther d. 2,6-Dibrom-4-Acetylamido-1-Oxybenzol. Sm. 206° (*Soc.* 81, 1479 *C.* 1903 [1] 23, 144).
- $C_9H_5O_2N_2J$  1)  $\alpha$ -Acetyl- $\beta$ -[2-Jodphenyl]harnstoff. Sm. 182° (*M.* 25, 961 *C.* 1904 [2] 1638).
- 2)  $\alpha$ -Acetyl- $\beta$ -[3-Jodphenyl]harnstoff. Sm. 201° (*M.* 25, 961 *C.* 1904 [2] 1638).
- 3)  $\alpha$ -Acetyl- $\beta$ -[4-Jodphenyl]harnstoff. Sm. 248° (*M.* 25, 958 *C.* 1904 [2] 1638).
- $C_9H_5O_2N_4Cl_3$  1) 2,6-Diketo-8-Trichlormethyl-1, 3, 7-Trimethylpurin. Sm. 182 bis 184° (D.R.P. 146714 *C.* 1903 [2] 1484; D.R.P. 153121 *C.* 1904 [2] 625).
- $C_9H_5O_2BrS$  1)  $\alpha$ -Merkaptopropion-4-Bromphenyläthersäure. Sm. 112° (*C.* 1903 [2] 1430).
- 2)  $\beta$ -Merkaptopropion-4-Bromphenyläthersäure. Sm. 115—116° (*C.* 1903 [2] 1430).
- $C_9H_5O_3NCl_2$  1) Aethylester d. 3,5-Dichlor-2-Oxyphenylamidoameisensäure. Sm. 125° (*Am.* 32, 31 *C.* 1904 [2] 697).
- 2) Aethyl-4,6-Dichlor-2-Amidophenylester d. Kohlensäure. HCl (*Am.* 31, 501 *C.* 1904 [2] 95; *Am.* 32, 30 *C.* 1904 [2] 697).
- $C_9H_5O_3NBr_2$  9) Methyläther d.  $\beta\beta$ -Dibrom- $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sm. 83° (*A.* 335, 10 *C.* 1903 [1] 287).
- $C_9H_5O_3NS$  \*6) Aethylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 94° (*Am.* 30, 285 *C.* 1903 [2] 1120; *B.* 37, 3254 *C.* 1904 [2] 1031).
- $C_9H_5O_3N_2Cl$  \*7) Aethyläther d.  $\alpha$ -Chlorimido- $\alpha$ -Oxy- $\alpha$ -[3-Nitrophenyl]methan. Sm. 61° (*Am.* 29, 314 *C.* 1903 [1] 1167).
- \*8) Dimethylamid d. 5-Chlor-2-Nitrobenzol-1-Carbonsäure (*C.* 1903 [2] 1174).
- \*9) Dimethylamid d. 4-Chlor-3-Nitrobenzol-1-Carbonsäure (*C.* 1903 [2] 1174).
- \*10) Dimethylamid d. 6-Chlor-3-Nitrobenzol-1-Carbonsäure (*C.* 1903 [2] 1174).

- $C_9H_9O_3N_2Cl$  12) Aldehyd d. 6-Chlor-3-Nitro-4-Dimethylamidobenzol-1-Carbonsäure. Sm. 122—123° (125°) (D.R.P. 90382; B. 37, 865 C. 1904 [1] 1207). — \*III, 14.
- $C_9H_9O_3N_2Br$  \*7) Aethyläther d.  $\alpha$ -Bromimido- $\alpha$ -Oxy- $\alpha$ -[3-Nitrophenyl]methan. Sm. 71°; Zers. bei 130° (Am. 29, 316 C. 1903 [1] 1167).
- $C_9H_9O_4N_2Cl$  6) Methyläther d. 4-Chlor-5-Nitro-2-Acetylamido-1-Oxybenzol. Sm. 193° (D.R.P. 137956 C. 1903 [1] 113).
- $C_9H_9O_5N_2Br$  1) Methyläther d.  $\beta$ -Brom- $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha$ -[4-Nitrophenyl]äthan. Sm. 126,5—127° (A. 325, 15 C. 1903 [1] 287).
- $C_9H_9O_5BrS$  4)  $\beta$ -[4-Bromphenyl]sulfon- $\alpha$ -Oxypropionsäure. Sm. 149° (C. 1903 [2] 1429).
- $C_9H_9O_7NS$  \*1) 1-Aethylester d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure.  $K + H_2O$ ,  $Ba + 4H_2O$  (Am. 30, 389 C. 1904 [1] 276).  
4) Dimethylester d. 2-Nitrobenzol-1-Carbonsäure-4-Sulfonsäure. Sm. 86—87° (M. 23, 1139 C. 1903 [1] 397).
- $C_9H_9N_2ClS$  1) Chlormethylat d. 5-Phenyl-1,2,3-Thiodiazol.  $2 + PtCl_4$ ,  $+ AuCl_3$  (A. 333, 14 C. 1904 [2] 781).
- $C_9H_9N_2JS$  1) Jodmethylat d. 5-Phenyl-1,2,3-Thiodiazol  $+ H_2O$ . Sm. 136° u. Zers. (A. 333, 13 C. 1904 [2] 780).
- $C_9H_9N_2JS_2$  1) Methyläther d. 2-Jod-5-Merkapto-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 151° (J. pr. [2] 67, 247 C. 1903 [1] 1264).
- $C_9H_{10}ONCl$  \*13) 3-Chlor-2-Methylphenylamid d. Essigsäure. Sm. 156° (B. 37, 1019 C. 1904 [1] 1202).  
\*38) Dimethylamid d. 3-Chlorbenzol-1-Carbonsäure (C. 1903 [2] 1174).  
\*43) Aethylchloramid d. Benzolcarbonsäure. Sm. 53,5° (Am. 29, 309 C. 1903 [1] 1166).  
49) 2-Chlorbenzimidooäthyläther. HCl (Soc. 83, 767 C. 1903 [2] 200, 437).  
50)  $\alpha$ - oder  $\beta$ -Chloräthyl-4-Amidophenylketon. Sm. 98° (D.R.P. 105199 C. 1900 [1] 240). — \*III, 113.  
51) Aldehyd d. 2-Chlor-4-Dimethylamidobenzol-1-Carbonsäure. Sm. 82° (B. 37, 864 C. 1904 [1] 1207).
- $C_9H_{10}ONBr$  26)  $\alpha$ - oder  $\beta$ -Bromäthyl-4-Amidophenylketon. Sm. 110—111° (D.R.P. 105199 C. 1900 [1] 240). — \*III, 114.  
27) Dimethylamid d. 4-Brombenzol-1-Carbonsäure. Sm. 72° (B. 37, 2816 C. 1904 [2] 649).  
28) 3-Brom-2-Methylphenylamid d. Essigsäure. Sm. 158° (B. 37, 1022 C. 1904 [1] 1203).
- $C_9H_{10}ONJ$  2) 3-Jod-2-Methylphenylamid d. Essigsäure. Sm. 166° (B. 37, 1024 C. 1904 [1] 1203).
- $C_9H_{10}ON_2S_2$  2) Methylester d.  $\beta$ -Phenylthioureidothiolameisensäure. Sm. 157 bis 158° (Am. 30, 176 C. 1903 [2] 872).
- $C_9H_{10}O_2NCl$  \*2) Methyläther d. 5-Chlor-2-Acetylamido-1-Oxybenzol. Sm. 150° (J. pr. [2] 67, 158 C. 1903 [1] 871).  
\*6) Methyläther d. 4-Chlor-2-Acetylamido-1-Oxybenzol. Sm. 104° (D.R.P. 137956 C. 1903 [1] 113).
- $C_9H_{10}O_2N_2S$  8) Methylester d. Phenylthiopseudoallophansäure. Sm. 166—167°. HCl (Soc. 83, 559 C. 1903 [1] 1123, 1306).  
9) Aethylcyanamid d. Benzolsulfonsäure. Sd. 195°, (B. 37, 2811 C. 1904 [2] 593).
- $C_9H_{10}O_2N_2S\tilde{S}$  1) Phenylamid d. Carbaminselenessigsäure. Sm. 118—119° (Ar. 241, 202 C. 1903 [2] 103).
- $C_9H_{10}O_2N_3J$  1) 3-Jodmethylat d. 6-Nitro-1-Methylbenzimidazol. Sm. 259°.  $+ J_2$  (B. 36, 3968 C. 1904 [1] 177).
- $C_9H_{10}O_2N_4Cl_2$  1) 2,6-Diketo-8-Dichlormethyl-1,3,7-Trimethylpurin. Sm. 230 bis 232° (D.R.P. 146714 C. 1903 [2] 1484).
- $C_9H_{10}O_3NCl$  3) Aethylester d. 3-Chlor-2-Oxyphenylamidoameisensäure. Sm. 92—93° (Am. 32, 27 C. 1904 [2] 697).  
4) Aethylester d. 5-Chlor-2-Oxyphenylamidoameisensäure. Sm. 136—137° (Am. 32, 24 C. 1904 [2] 696).  
5) Aethyl-4-Chlor-2-Amidophenylester d. Kohlensäure. HCl, (2HCl,  $PtCl_4$ ) (Am. 31, 501 C. 1904 [2] 95; Am. 32, 23 C. 1904 [2] 696).

- $C_9H_{10}O_3NCl$  6) Aethyl-6-Chlor-2-Amidophenylester d. Kohlensäure. HCl (*Am.* 31, 501 *C.* 1904 [2] 95; *Am.* 32, 27 *C.* 1904 [2] 696).  
 $C_9H_{10}O_3NBr$  3) Methyläther d.  $\beta$ -Brom- $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sd. 159°<sub>10</sub>. K. (A. 325, 8 *C.* 1903 [1] 287).  
 4) Aethylester d. 5-Brom-2-Oxyphenylamidoameisensäure. Sm. 140–142° (*Am.* 32, 28 *C.* 1904 [2] 697).  
 5) Aethyl-4-Brom-2-Amidophenylester d. Kohlensäure. HCl (*Am.* 31, 501 *C.* 1904 [2] 95; *Am.* 32, 28 *C.* 1904 [2] 697).  
 $C_9H_{10}O_3N_2S$  5) Methyl ester d. 3-Thioureido-4-Oxybenzol-1-Carbonsäure. Sm. 163° (A. 325, 322 *C.* 1903 [1] 770).  
 $C_9H_{10}O_3N_3Cl$  1) 6-Chlor-3-Nitro-4-Dimethylamidobenzaldoxim. Sm. 178° (B. 37, 865 *C.* 1904 [1] 1207).  
 $C_9H_{10}O_4N_2S$  \*2) Phenylsulfonacetylarnstoff. Sm. 225° (*Ar.* 241, 188 *C.* 1903 [2] 103).  
 3)  $\alpha$ -Acetyl- $\beta$ -Phenylsulfonarnstoff. Sm. 155–156° (B. 37, 695 *C.* 1904 [1] 1074).  
 $C_9H_{10}O_6N_3S$  3) 5-Nitro-2-Methylphenylsulfonamidoessigsäure. Sm. 178°. Ba (H. 43, 68 *C.* 1904 [2] 1607).  
 $C_9H_{10}N_2ClJ$  1) Jodmethylat d. 5- oder 6-Chlor-1-Methylbenzimidazol (B. 37, 556 *C.* 1904 [1] 893).  
 $C_9H_{10}Cl_2BrJ$  1)  $\alpha\beta$ -Dichloräthyl-3-Methylphenyljodoniumbromid. Sm. 166° (A. 327, 285 *C.* 1903 [2] 351).  
 $C_9H_{11}ONSe$  1) Methylphenylamid d. Selenessigsäure. Cu (*Ar.* 241, 218 *C.* 1903 [2] 104).  
 $C_9H_{11}ON_2Cl$  4) 5-Chlor-2-Oxy-1,3-Dimethyl-2,3-Dihydrobenzimidazol. Sm. 106° (B. 37, 556 *C.* 1904 [1] 893).  
 $C_9H_{11}ON_3Cl_2$  1) 2-Semicarbazon-1-Dichlormethyl-1-Methyl-1,2-Dihydrobenzol. Sm. 198° (B. 35, 4214 *C.* 1903 [1] 161).  
 2) 4-Semicarbazon-1-Dichlormethyl-1-Methyl-1,4-Dihydrobenzol. Sm. 184° (B. 35, 4212 *C.* 1903 [1] 161).  
 $C_9H_{11}ON_3S$  4) Methyläther d.  $\alpha$ -Phenylamidothioformylimido- $\alpha$ -Amido- $\alpha$ -Oxymethan (O-Methylthiophenylureidoisoharnstoff). Sm. 131° (*C.* 1904 [2] 29).  
 $C_9H_{11}OCl_2J$  1)  $\alpha\beta$ -Dichloräthyl-3-Methylphenyljodoniumhydrat. Salze siehe (A. 327, 284 *C.* 1903 [2] 351).  
 $C_9H_{11}O_2NS$  8) Allylamid d. Benzolsulfonsäure. Sm. 40,5–41° (B. 36, 2707 *C.* 1903 [2] 829).  
 11) 2-Methylphenylamid d. Aethensulfonsäure. Sm. 64–65° (B. 36, 3630 *C.* 1903 [2] 1327).  
 12) 3-Methylphenylamid d. Aethensulfonsäure. Sm. 88° (B. 36, 3630 *C.* 1903 [2] 1327).  
 13) 4-Methylphenylamid d. Aethensulfonsäure. Sm. 74° (B. 36, 3628 *C.* 1903 [2] 1327).  
 $C_9H_{11}O_2N_2Cl$  \*1) Methyläther d. 4-Chlor-2-Acetylamido-5-Amido-1-Oxybenzol (D.R.P. 153940 *C.* 1904 [2] 1014).  
 $C_9H_{11}O_2N_3S$  5)  $\alpha$ -Methylamid d.  $\alpha$ -Phenylhydrazin- $\alpha$ -Thiocarbonsäure- $\beta$ -Carbonsäure. Sm. 90° (B. 37, 2337 *C.* 1904 [2] 315).  
 6)  $\beta$ -Methylamid d.  $\alpha$ -Phenylhydrazin- $\alpha$ -Carbonsäure- $\beta$ -Thiocarbonsäure. Na (B. 37, 624 *C.* 1904 [1] 957).  
 $C_9H_{11}O_2N_4Cl$  4) 2,6-Diketo-8-Chlormethyl-1,3,7-Trimethylpurin. Sm. 208–210° (D.R.P. 146714 *C.* 1903 [2] 1484).  
 $C_9H_{11}O_2ClSe$  1) d-Methylphenylselenetinchlorid. 2 + PtCl<sub>4</sub> (*Soc.* 81, 1555 *C.* 1903 [1] 22, 144).  
 2) l-Methylphenylselenetinchlorid. 2 + PtCl<sub>4</sub> (*Soc.* 81, 1555 *C.* 1903 [1] 22, 144).  
 $C_9H_{11}O_2BrSe$  1) Methylphenylselenetinbromid. Sm. 111° (*Soc.* 81, 1553 *C.* 1903 [1] 22, 144).  
 $C_9H_{11}O_2JSe$  1) i-Methylphenylselenetinjodid. HgJ<sub>2</sub> (*Soc.* 81, 1556 *C.* 1903 [1] 23, 144).  
 $C_9H_{11}O_3NBr_2$  1) Dibromdihydrodamascenin. HBr (*Ar.* 242, 302 *C.* 1904 [2] 456).  
 2) Dibromdihydrodamascenin-S. Sm. 206–208° (*Ar.* 242, 314 *C.* 1904 [2] 457).  
 $C_9H_{11}O_3NS$  7)  $\alpha$ -Phenylsulfonamido- $\beta$ -Ketobutan. Sm. 88–89° (B. 37, 2478 *C.* 1904 [2] 419).

- $C_9H_{11}O_4NS$  \*16) 2-Aethylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure.  $K_2 + 2H_2O$ , Ba (*Am.* 30, 286 *C.* 1903 [2] 1121).
- 19) Aldehyd d. 4-Dimethylamidobenzol-1-Carbonsäure- $\beta$ -Sulfonsäure. Ca (*C.* 1898 [1] 813). — \*III, 17.
- 20) Aethylester d. Phenylsulfonamidoameisensäure. Sm. 109°. Na (*B.* 37, 694 *C.* 1904 [1] 1074).
- $C_9H_{11}O_5NS$  11)  $\alpha$ -[4-Methoxylbenzoyl]methan- $\alpha$ -Sulfonsäure. Na +  $H_2O$  (*B.* 37, 4098 *C.* 1904 [2] 1726).
- 12) 2-Aethylester d. Phenylsulfaminsäure-2-Carbonsäure. Na (*D.R.P.* 147552 *C.* 1904 [1] 129).
- 13) 3-Aethylester d. Phenylsulfaminsäure-3-Carbonsäure. Na (*D.R.P.* 147552 *C.* 1904 [1] 129).
- 14) 4-Aethylester d. Phenylsulfaminsäure-4-Carbonsäure. Na (*D.R.P.* 147552 *C.* 1904 [1] 130).
- $C_9H_{12}ON_2S$  7)  $\alpha$ -[ $\beta$ -Oxyäthyl]- $\beta$ -Phenylthioharnstoff. Sm. 138° (*B.* 36, 1280 *C.* 1903 [1] 1215).
- $C_9H_{12}O_3N_2S$  6) sym-Di[Methylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 74° (*Am.* 30, 283 *C.* 1903 [2] 1120).
- 7) uns-Di[Methylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. Zers. oberh. 330° (*Am.* 30, 284 *C.* 1903 [2] 1121).
- $C_9H_{12}O_4N_2S$  4)  $\alpha$ -[ $\beta$ -Phenylureido]äthan- $\beta$ -Sulfonsäure. Zers. bei 175°. Ba +  $1\frac{1}{2}H_2O$  (*B.* 36, 3343 *C.* 1903 [2] 1175).
- $C_9H_{13}ON_3Br_2$  1) 5,6-Dibrom-4-Semicarbazon-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 202° u. Zers. (*Soc.* 83, 123 *C.* 1903 [1] 449).
- $C_9H_{13}O_2NBr_2$  1) d-Anhydroecgonindibromid. HCl, (HBr,  $Br_2$ ) (*B.* 23, 2873; *Ar.* 242, 15 *C.* 1904 [1] 732).
- $C_9H_{13}O_3NS$  14)  $\alpha$ -[4-Methylphenyl]amidoäthan- $\beta$ -Sulfonsäure. Sm. 254° u. Zers. Ba (*M.* 25, 685 *C.* 1904 [2] 1122).
- $C_9H_{14}ONJ$  3) Trimethyl-4-Oxyphenylammoniumjodid +  $H_2O$ . Sm. 190–201° (*A.* 334, 308 *C.* 1904 [2] 986).
- $C_9H_{14}ON_3Cl$  1) 6-Chlor-4-Semicarbazon-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 199° u. Zers. (*Soc.* 83, 118 *C.* 1903 [1] 448).
- $C_9H_{14}ON_3Br$  1) 6-Brom-4-Semicarbazon-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 190° u. Zers. (*Soc.* 83, 121 *C.* 1903 [1] 448).
- $C_9H_{14}O_2NCl$  2) Chlormethylat d. 2-[ $\beta\beta'$ -Dioxyisopropyl]pyridin. +  $6HgCl_2$ , ( $2 + PtCl_4 + 2H_2O$ ), +  $AuCl_3$  (*B.* 37, 740 *C.* 1904 [1] 1089).
- $C_9H_{14}O_2NBr$  \*2) Anhydroecgoninhydrobromid. HBr (*Ar.* 242, 16 *C.* 1904 [1] 732).
- $C_9H_{14}O_4N_2Br_2$  1) Aethylester d.  $\alpha\beta$ -Dibrompropionylamidoacetylamidoessigsäure. Sm. 151–152° (*B.* 37, 2510 *C.* 1904 [2] 427).
- $C_9H_{14}NClS$  1) Chlormethylat d. 4-Merkapto-2,6-Dimethylpyridin-4-Methyläther.  $2 + PtCl_4$  (*A.* 331, 258 *C.* 1904 [1] 1223).
- $C_9H_{14}NClSe$  1) Chlormethylat d. 4-Seleno-2,6-Dimethylpyridin-4-Methyläther. Sm. 210°.  $2 + PtCl_4$  (*A.* 331, 262 *C.* 1904 [1] 1223).
- $C_9H_{14}NJS$  1) Jodmethylat d. 4-Merkapto-2,6-Dimethylpyridin-4-Methyläther. Sm. 236° (*A.* 331, 258 *C.* 1904 [1] 1223).
- $C_9H_{14}NJSe$  1) Jodmethylat d. 4-Seleno-2,6-Dimethylpyridin-4-Methyläther. Sm. 219° u. Zers. (*A.* 331, 262 *C.* 1904 [1] 1223).
- $C_9H_{15}O_4N_2Br$  1) Aethylester d.  $\alpha$ -Brompropionylamidoacetylamidoessigsäure. Sm. 135–136° (*B.* 36, 2985 *C.* 1903 [2] 1112).
- $C_9H_{16}ONCl$  \*6) Pulegennitroschlorid. Sm. 74–75° (*A.* 327, 131 *C.* 1903 [1] 1412).
- 7) Chlorid d. i-Amidolauronsäure. Sm. 266° u. Zers. (*Am.* 28, 485 *C.* 1903 [1] 329).
- $C_9H_{17}ONBr_2$  \*2) Brommethylat d. Brompseudotropin. Sm. 237–238° u. Zers. (*A.* 326, 18 *C.* 1903 [1] 778).
- 3) Brommethylat d. Bromtropin. Sm. 233° (*A.* 326, 12 *C.* 1903 [1] 778).
- 4) 6,7-Dibrom-3-Dimethylamido-1-Oxy-R-Heptamethylen ( $\alpha$ -Methyltropindibromid). HBr (*A.* 326, 11 *C.* 1903 [1] 778).
- $C_9H_{17}OJHg$  \*1) lab.  $\beta\zeta$ -Dimethylheptan- $\beta\zeta$ -Oxyd- $\gamma$ -Quecksilberjodid. Fl. (*A.* 329, 169 *C.* 1903 [2] 1413).
- 2) stab.  $\beta\zeta$ -Dimethylheptan- $\beta\zeta$ -Oxyd- $\gamma$ -Quecksilberjodid. Sm. 108 bis 110° (*A.* 329, 170 *C.* 1903 [2] 1413).

- $C_9H_{17}NClBr$  3) Chlormethylat d. Bromtropan. 2 +  $PtCl_4$  (A. 326, 36 C. 1903 [1] 779).
- $C_9H_{17}NBrJ$  3) Jodmethylat d. Bromtropan (A. 326, 35 C. 1903 [1] 779).
- $C_9H_{15}O_2NJ$  2) Jodmethylat d. 1-Methyltetrahydropyrrol-2-Carbonsäureäthylester. Sm. 88–89° (A. 326, 126 C. 1903 [1] 844).
- $C_9H_{15}O_2JHg$  \* 1) stab.  $\beta\zeta$ -Dioxy- $\beta\zeta$ -Dimethylheptan- $\gamma$ -Quecksilberjodid. Sm. 124 bis 125° (A. 329, 173 C. 1903 [2] 1413).
- 2) lab.  $\beta\zeta$ -Dioxy- $\beta\zeta$ -Dimethylheptan- $\gamma$ -Quecksilberjodid. Fl. (A. 329, 172 C. 1903 [2] 1413).
- $C_9H_{20}ONCl$  6) Chlormethylat d. 3,4,4,6-Tetramethyltetrahydro-1,3-Oxazin. 2 +  $PtCl_4$ , +  $AuCl_3$  (M. 25, 834, 838 C. 1904 [2] 1240).
- $C_9H_{22}ONCl$  1) Chlormethylat d.  $\delta$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylpentan. 2 +  $PtCl_4$ , +  $AuCl_3$  (M. 25, 848 C. 1904 [2] 1240).
- 2) Chlormethylat d.  $\beta$ -Dimethylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. +  $AuCl_3$  (M. 25, 144 C. 1904 [1] 866).
- $C_9H_{22}ONJ$  1) Jodmethylat d.  $\beta$ -Dimethylamido- $\delta$ -Oxy- $\beta$ -Methylpentan (M. 25, 147 C. 1904 [1] 866).
- $C_9H_{23}ON_2P$  1) Di[Diäthylamid] d. Methylphosphinsäure. Sd. 145–148°<sub>22</sub> (A. 326, 163 C. 1903 [1] 761).
- $C_9H_{24}ON_3P$  1) Tri[Propylamid] d. Phosphorsäure. Fl. (A. 326, 177 C. 1903 [1] 819).
- $C_9H_{24}O_2N_2Cl_2$  1) Methylenäther d. Oxytetramethylammoniumchlorid. +  $PtCl_4$ , + 2  $AuCl_3$  (A. 334, 33 C. 1904 [2] 947).
- $C_9H_{24}N_3SP$  1) Tri[Propylamid] d. Thiophosphorsäure. Sm. 73° (A. 326, 207 C. 1903 [1] 821).

## — 9 V —

- $C_9H_7ONCl_2Br_2$  1) 4-Chlor-2,6-Dibromphenylechloramid d. Propionsäure. Sm. 74° (Soc. 85, 181 C. 1904 [1] 938).
- $C_9H_7ON_2ClSe$  1) 3-Chlorphenylamid d. Selencyanessigsäure. Sm. 117–118° (Ar. 241, 209 C. 1903 [2] 104).
- 2) 4-Chlorphenylamid d. Selencyanessigsäure. Sm. 178° u. Zers. (Ar. 241, 210 C. 1903 [2] 104).
- $C_9H_7ON_2BrSe$  1) 3-Bromphenylamid d. Selencyanessigsäure. Sm. 105° (Ar. 241, 212 C. 1903 [2] 104).
- 2) 4-Bromphenylamid d. Selencyanessigsäure. Sm. 188° u. Zers. (Ar. 241, 213 C. 1903 [2] 104).
- $C_9H_7ON_4S_3P$  1) Phosphoryltrithiocyanat + Anilin. Sm. 120–121° (Soc. 85, 366 C. 1904 [1] 1407).
- $C_9H_7O_5NClBr$  2) Äthyl-4-Chlor-6-Brom-2-Nitrophenylester d. Kohlensäure. Sm. 48–49,5° (Am. 32, 31 C. 1904 [1] 938).
- $C_9H_8ONClBr_2$  2) 4-Chlor-2,6-Dibromphenylamid d. Propionsäure. Sm. 185° (Soc. 85, 181 C. 1904 [1] 938).
- 3) 2-Chlor-4,6-Dibromphenylamid d. Propionsäure. Sm. 185,5° (Soc. 85, 182 C. 1904 [1] 938).
- $C_9H_8ONCl_2Br$  2) 2,4-Dichlor-6-Bromphenylamid d. Propionsäure. Sm. 165° (Soc. 85, 182 C. 1904 [1] 938).
- 3) 2,6-Dichlor-4-Bromphenylamid d. Propionsäure. Sm. 184° (Soc. 85, 182 C. 1904 [1] 938).
- $C_9H_8O_2ClBrS$  1)  $\alpha$ -Chlor- $\beta$ -Merkaptopropion-4-Bromphenyläthersäure (C. 1903 [2] 1429).
- $C_9H_8O_6NClS$  \* 1) 2-Chlorid d. 4-Nitrobenzol-1-Carbonsäureäthylester-2-Sulfonsäure. Sm. 68° (Am. 30, 389 C. 1904 [1] 275).
- $C_9H_9ONClBr$  5) 2-Chlor-4-Bromphenylamid d. Propionsäure. Sm. 129° (Soc. 85, 180 C. 1904 [1] 938).
- 6) 4-Chlor-2-Bromphenylamid d. Propionsäure. Sm. 128,5° (Soc. 85, 180 C. 1904 [1] 938).
- 7) 2-Chlor-6-Brom-4-Methylphenylamid d. Essigsäure. Sm. 201 bis 202° (Soc. 85, 1289 C. 1904 [2] 1302).
- $C_9H_9O_8NClBr$  1) Äthylester d. 5-Chlor-3-Brom-2-Oxyphenylamidoameisensäure. Sm. 116–118° (Am. 32, 33 C. 1904 [2] 697).
- 2) Äthyl-4-Chlor-6-Brom-2-Amidophenylester d. Kohlensäure. HCl (Am. 31, 501 C. 1904 [2] 95; Am. 32, 32 C. 1904 [2] 697).

- $C_9H_{10}ONCl_2P$  1) Dichlorid d. 1, 2, 3, 4-Tetrahydro-1-Chinolyolphosphinsäure. Sm. 79° (A. 326, 187 C. 1903 [1] 820).
- $C_9H_{10}O_2NBrS$  \*1)  $\alpha$ -Amido- $\beta$ -Merkaptopropion-4-Bromphenyläthersäure. Sm. 192° (C. 1903 [2] 1429).
- $C_9H_{10}O_3N_2Br_2S$  1) Diamid d.  $\alpha\beta$ -Dibrom- $\beta$ -[4-Sulfofenyl]propionsäure. Sm. 208° (C. 1903 [2] 439).
- $C_9H_{10}O_4NBrS$  4)  $\alpha$ -Amido- $\beta$ -[4-Bromphenyl]sulfonpropionsäure. Sm. 196° u. Zers. (C. 1903 [2] 1429).
- $C_9H_{12}ONCl_2P$  1) 2,4,5-Trimethylphenylmonamid d. Phosphorsäuredichlorid. Sm. 122° (A. 326, 240 C. 1903 [1] 868).
- 2) 2,4,6-Trimethylphenylamid d. Phosphorsäuredichlorid. Sm. 155° (A. 326, 240 C. 1903 [1] 868).
- $C_9H_{13}O_3NBrP$  1) 2-Brom-4-Methylphenylmonamid d. Phosphorsäuremonoäthylester. K (A. 326, 239 C. 1903 [1] 868).
- $C_9H_{17}ONBrJ$  1) Jodmethylat d. Bromtropin. Sm. 233—234° u. Zers. (A. 326, 13 C. 1903 [1] 778).
- 2) Jodmethylat d. Brompseudotropin. Sm. 238° u. Zers. (A. 326, 19 C. 1903 [1] 778).
- $C_9H_{20}O_2NSP$  1) Diäthylester d. 1-Piperidylphosphinsäure. Sd. 138°<sub>10</sub> (A. 326, 214 C. 1903 [1] 822).

### C<sub>10</sub>-Gruppe.

- $C_{10}H_8$  \*1) Naphtalin (C. 1903 [2] 575; B. 37, 2531 C. 1904 [2] 447).
- $C_{10}H_{10}$  \*9)  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien. Sd. 90—92°<sub>16</sub> (B. 36, 4324 C. 1904 [1] 453; B. 37, 2103 C. 1904 [2] 104).
- \*10) Phenyleyklobutadien. Sm. 25°; Sd. 120—122°<sub>10</sub> (B. 36, 4323 C. 1904 [1] 453).
- 13) Isocyklobutadien. Sm. 100—101°; Sd. 155—165°<sub>16</sub> (B. 36, 4323 C. 1904 [1] 453).
- $C_{10}H_{12}$  \*1)  $\delta$ -Phenyl- $\alpha$ -Buten. Sd. 182—185°<sub>747</sub> (B. 36, 3000 C. 1903 [2] 949; B. 36, 4323 C. 1904 [1] 453).
- \*2)  $\alpha$ -Phenyl- $\alpha$ -Buten. Sd. 188—190° (B. 36, 774 C. 1903 [1] 835; B. 37, 2312 C. 1904 [2] 216).
- \*3)  $\alpha$ -Phenyl- $\beta$ -Methylpropen. Sd. 181—182°<sub>761</sub> (B. 37, 1722 C. 1904 [1] 1515).
- \*8) 1,2,3,4-Tetrahydronaphtalin. Sd. 206° (C. r. 139, 673 C. 1904 [2] 1654).
- \*12)  $\alpha$ -[4-Methylphenyl]propen. Sd. 195—197° (B. 36, 2235 C. 1903 [2] 437).
- \*14) 4-Aethylphenyläthen. Sd. 68°<sub>11</sub> (B. 36, 1633 C. 1903 [2] 25).
- 16)  $\alpha$ -Phenyl- $\beta$ -Buten. Sd. 176°<sub>785</sub> (B. 35, 2651 C. 1902 [2] 588; B. 37, 843 C. 1904 [1] 1144; B. 37, 2310 C. 1904 [2] 216).
- 17) 2,4-Dimethylphenyläthen. Sd. 79—80°<sub>12</sub> (B. 36, 1638 C. 1903 [2] 26).
- 18) 2,5-Dimethylphenyläthen. Sd. 69°<sub>10</sub> (B. 36, 1639 C. 1903 [2] 26).
- $C_{10}H_{14}$  \*2) Isobutylbenzol (Bl. [3] 31, 966 C. 1904 [2] 1112).
- \*4) tert. Butylbenzol. Sd. 168,2°<sub>760</sub> (Bl. [3] 31, 965 C. 1904 [2] 1112).
- \*12) 1,4-Diäthylbenzol (B. 36, 1633 C. 1903 [2] 25).
- \*15) 4-Aethyl-1,3-Dimethylbenzol. Sd. 184—185°<sub>754</sub> (B. 36, 1638 C. 1903 [2] 26).
- \*17) 2-Aethyl-1,4-Dimethylbenzol. Sd. 185,5°<sub>759</sub> (B. 36, 1640 C. 1903 [2] 27).
- $C_{10}H_{16}$  \*7) 1-Camphen. Sm. 40°; Sd. 159—160° (C. 1903 [1] 835; J. pr. [2] 66, 492 C. 1903 [1] 516; D.R.P. 149791 C. 1904 [1] 1042; D.R.P. 153924 C. 1904 [2] 678; D.R.P. 154107 C. 1904 [2] 965).
- \*11) Carvestren (J. pr. [2] 68, 111 C. 1903 [2] 722).
- \*15) Dipenten (5-Methyl-2- $\alpha$ -Methyläthenyl-1,2,3,4-Tetrahydrobenzol) (Soc. 85, 668 C. 1904 [2] 331).
- \*20) Fenchon (J. pr. [2] 67, 94 C. 1903 [1] 636).
- \*28) Myrcen. Sd. 166—168°<sub>774</sub> (Soc. 83, 506 C. 1903 [1] 1028).
- \*30) d- $\alpha$ -Phellandren (J. pr. [2] 68, 294 C. 1903 [2] 949).
- \*33) Pinen. + 2CrO<sub>2</sub>Cl<sub>2</sub> (C. 1903 [2] 372; Soc. 83, 1301 C. 1904 [1] 95).
- \*30) d-4-Methyl-1-Isopropyl-1,2-Dihydrobenzol (d- $\alpha$ -Phellandren). Sd. 61°<sub>11</sub> (B. 36, 1749 C. 1903 [2] 116; A. 336, 12 C. 1904 [2] 1466).
- \*31) l- $\alpha$ -Phellandren (A. 336, 12 C. 1904 [2] 1466).
- \*49) Thujen (J. pr. [2] 67, 573 C. 1903 [2] 245).

- C<sub>10</sub>H<sub>16</sub>** \*121) Bornylen. Sm. 101—101,5°; Sd. 149—149,5° (*J. pr.* [2] 67, 280 *C.* 1903 [1] 922).  
 \*122) isom. Fenchon (aus sec. Fenchylalkohol). Sd. 159—161° (*J. pr.* [2] 68, 108 *C.* 1903 [2] 722).  
 \*124) 1- $\alpha$ -Thujen (*B.* 37, 1483 *C.* 1904 [1] 1349).  
 \*138) Kohlenwasserstoff (aus Kautschuköl) (*B.* 37, 3845 *C.* 1904 [2] 1613).  
 140)  $\beta$ -Dimethyl- $\delta$ -Methylen- $\beta$ -Heptadien. Sd. 55—57°<sub>14</sub> (*B.* 37, 3580 *C.* 1904 [2] 1376).  
 141) 6-Isopropyl-3-Methyl-1,2-Dihydrobenzol (p-Menthadien). Sd. 174 bis 176°<sub>68</sub> (*A.* 328, 323 *C.* 1903 [2] 1062).  
 142) 3-Isopropyl-1-Methyl-p-Dihydrobenzol. Sd. 172—174° (*A.* 328, 117 *C.* 1903 [2] 245).  
 143)  $\beta$ -[1-Methyl-1,2,3,4-Tetrahydrophenyl-4-]propen<sup>p</sup> Sd. 75—80° (*B.* 36, 489 *C.* 1903 [1] 637).  
 144) 2-Aethenyl-1,1,5-Trimethyl-2,3-Dihydro-R-Penten. Sd. 157—158° (*C. r.* 136, 1462 *C.* 1903 [2] 287).  
 145)  $\beta$ -Phellandren. Sd. 57°<sub>11</sub> (*G.* 16, 225; *A.* 336, 42 *C.* 1904 [2] 1468). — *III*, 529.  
 146) Tricyklodekan (Tetrahydrodicyklopentadien). Sm. 77°; Sd. 193°<sub>760</sub> (*C.* 1903 [2] 989).  
 147) isom. Tricyklodekan. Sm. 9°; Sd. 191,5°<sub>760</sub> (*C.* 1903 [2] 989).  
 148) Cyklen. Sm. 67,5—67,8°; Sd. 152,8—153°<sub>767,5</sub> (*J. r.* 29, 121; *B.* 37, 1035 *C.* 1904 [1] 1263).  
 149) synth. Paraterpen. Sd. 174° (*B.* 25, 2122; 26, 232; 27, 453). — \**III*, 401.  
 150) 1- $\beta$ -Thujen. Sd. 150—151°<sub>750</sub> (*B.* 34, 2279; *B.* 37, 1482 *C.* 1904 [1] 1349).  
 151) Tricylen. Sm. 65—66°; Sd. 153° (*C.* 1897 [1] 1055). — \**III*, 402.  
 152) Terpen (aus Cinnamomumpedatinervium). Sd. 167—172° (*Soc.* 83, 1095 *C.* 1903 [2] 794).  
 153) Terpen (aus d. Oel von *Amorpha fruticosa*). Sd. 150—220°<sub>760</sub> (*C.* 1904 [2] 224).  
 154) Kohlenwasserstoff (aus Thymianöl). Sd. 156—158° (*Bl.* [3] 19, 1010). — \**III*, 401.  
 155) Kohlenwasserstoff (aus Fenchylchlorid). Sd. 181—184° (*J. pr.* [2] 68, 109 *C.* 1903 [2] 722).  
 156) Kohlenwasserstoff (aus Guttapercha). Sd. 170° (*C.* 1903 [1] 83).  
 157) polym. Kohlenwasserstoff (aus Cineol). Sd. 200—245°<sub>22</sub> (*Ar.* 242, 193 *C.* 1904 [1] 1350).  
**C<sub>10</sub>H<sub>18</sub>** \*5) Menthon. Sd. 168—168,5° (*B.* 37, 1375 *C.* 1904 [1] 1441).  
 \*10) Dekahydronaphtalin. Sd. 187—188° (*C. r.* 139, 674 *C.* 1904 [2] 1654).  
 39) 5-Methyl-2-Isopropyl-1,2,3,4-Tetrahydrobenzol (Dihydrophellandren; Dihydrolimonen). Sd. 173—174° (*B.* 36, 1035 *C.* 1903 [1] 1134; *B.* 36, 1753 *C.* 1903 [2] 117).  
 40) 1-Methylbicyclo-[1,3,3]-Nonan. Sd. 176—178°<sub>761</sub> (*B.* 37, 1674 *C.* 1904 [1] 1607).  
 41) Cineolen. Sd. 165—167° (*Ar.* 242, 185 *C.* 1904 [1] 1350).  
 42) Dihydrotanacetan. Sd. 164—166° (*B.* 36, 1037 *C.* 1903 [1] 1135).  
 43) Thujamenthen. Sd. 157—159°<sub>760</sub> (*B.* 37, 1485 *C.* 1904 [1] 1350).  
 44) Kohlenwasserstoff (aus Bornyljodid oder Hydrojodpinen). Sd. 157—159° (*B.* 35, 4419 *C.* 1903 [1] 330).  
 45) Kohlenwasserstoff (aus Chlorcampher). Sd. 315° (*C. r.* 135, 1349 *C.* 1903 [1] 322).  
 46) Kohlenwasserstoff (aus d. Glykol C<sub>10</sub>H<sub>22</sub>O<sub>2</sub>). Sd. 138° (*M.* 24, 582 *C.* 1903 [2] 870).  
**C<sub>10</sub>H<sub>20</sub>** 25)  $\gamma$ -Methyl- $\gamma$ -Aethyl- $\gamma$ -Hepten. Sd. 157—158°<sub>760</sub> (*Bl.* [3] 31, 753 *C.* 1904 [2] 303).

- C<sub>10</sub>H<sub>6</sub>O<sub>3</sub>** 6) Verbindung (aus Diphenacylfumarsäure) (*A.* 299, 60). — \**II*, 1191.  
**C<sub>10</sub>H<sub>6</sub>O<sub>3</sub>** \*3) 5-Oxy-1,4-Naphtochinon. Sm. 154° (*C.* 1903 [2] 1109).  
 7) 1,3-Diketo-2-Oxymethylen-2,3-Dihydroinden + H<sub>2</sub>O. Sm. 141 bis 142° (wasserfrei). NH<sub>4</sub>, Na, Cu (*G.* 32 [2] 330 *C.* 1903 [1] 586; *G.* 33 [1] 417 *C.* 1903 [2] 950).  
 8) Aldehyd d. 1,2-Benzpyron-6-Carbonsäure. Sm. 187° (*B.* 37, 195 *C.* 1904 [1] 661).

- $C_{10}H_6O_4$  \*2) Naphtazarin. 2 + Essigsäures Kali (*Soc.* 83, 140 *C.* 1903 [1] 89, 466).  
 \*8) 1,2-Benzpyron-3-Carbonsäure. Sm. 188° (*C.* 1903 [1] 89).  
 15) 1,2-Benzpyron-6-Carbonsäure. Sm. 267—268° u. Zers. (*B.* 37, 196 *C.* 1904 [1] 661).  
 $C_{10}H_6O_5$  10) Benzfuran-1,4-Dicarbonsäure. Sm. noch nicht bei 310° (*B.* 37, 200 *C.* 1904 [1] 661).  
 $C_{10}H_6O_6$  \*5) 2,3-oder 3,4-Anhydrid d. 5-Oxy-1-Methylbenzol-2,3,4-Tricarbon-säure. +  $C_6H_4O_2$  (*B.* 37, 3346 *C.* 1904 [2] 1057).  
 6)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenylmethan- $\alpha$ ,2,5-Tricarbon-säure (Phtaliddicarbonsäure) (*B.* 36, 843 *C.* 1903 [1] 971).  
 $C_{10}H_7Cl$  \*1) 1-Chlornaphtalin (*C. r.* 135, 1122 *C.* 1903 [1] 283).  
 $C_{10}H_8O_2$  \*4) 1,5-Dioxynaphtalin (*J. pr.* [2] 69, 84 *C.* 1904 [1] 812).  
 \*7) 1,8-Dioxynaphtalin (*J. pr.* [2] 69, 87 *C.* 1904 [1] 813).  
 \*15) 1-Acetylbenzfuran. Sm. 75—76° (*B.* 36, 2864 *C.* 1903 [2] 832).  
 \*24) Methylester d. Phenylpropionsäure. Sm. 24—26° (*Bl.* [3] 31, 495 *C.* 1904 [1] 1602).  
 $C_{10}H_8O_3$  \*20) Anhydrid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 53—54° (*M.* 24, 418 *C.* 1903 [2] 622; *Soc.* 85, 1365 *C.* 1904 [2] 1646).  
 33) 6-Oxymethyl-1,2-Benzpyron. Sm. 150° (*B.* 37, 194 *C.* 1904 [1] 660).  
 34) isom.  $\gamma$ -Keto- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure +  $H_2O$ . Sm. 53—54° (57° wasserfrei) (*B.* 36, 2528 *C.* 1903 [2] 496).  
 $C_{10}H_8O_4$  \*11)  $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 242° (*C.* 1904 [1] 880).  
 \*23) Methylester d. Phtalidcarbonsäure. Sm. 57° (*A.* 334, 358 *C.* 1904 [2] 1054).  
 33) 5,7-Dioxy-2-Methyl-1,4-Benzpyron. Sm. 290° (*B.* 37, 2100 *C.* 1904 [2] 122).  
 34) 7,8-Dioxy-2-Methyl-1,4-Benzpyron +  $\frac{1}{2}H_2O$ . Sm. 243° (wasserfrei) (*B.* 36, 2192 *C.* 1903 [2] 384).  
 35) 5,7-Dioxy-4-Methyl-2,1-Benzpyron. Sm. 258° (*D.R.P.* 73700). — \*II, 1125.  
 36) Isoanemonin (*Ar.* 230, 201). — \*III, 456.  
 37) 4-Oxymethylbenzfuran-1-Carbonsäure. Sm. 210°. Ca (*B.* 37, 199 *C.* 1904 [1] 661).  
 38) Aldehyd d. 3,4,5-Trioxyl-Äthenylbenzol-4,5-Methylenäther-2-Carbonsäure (Norcotanon). Sm. 89°. K (*B.* 36, 1530 *C.* 1903 [2] 52).  
 39) Monophenylester d. Fumarsäure. Sm. 130° (*B.* 35, 4087 *C.* 1903 [1] 75).  
 40) Monophenylester d. Maleinsäure. Sm. 101° (*B.* 35, 4089 *C.* 1903 [1] 75).  
 41) polym. 1,2-Phenyleneester d. Bernsteinsäure. =  $(C_{10}H_5O_4)_x$ . Sm. 190° (*B.* 35, 4075 *C.* 1903 [1] 73).  
 42) polym. 1,4-Phenyleneester d. Bernsteinsäure. =  $(C_{10}H_5O_4)_x$ . Sm. 267 bis 269° (*B.* 35, 4076 *C.* 1903 [1] 73).  
 $C_{10}H_8O_5$  19) 2-Methylester d. Benzol-1-Carbonsäure-2-Ketocarbonsäure +  $H_2O$ . Sm. 79—81° (*M.* 24, 926 *C.* 1904 [1] 514; *M.* 25, 391 *C.* 1904 [2] 324).  
 $C_{10}H_8N_6$  15) Dianhydrid d. cis-Hexahydrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 60° (*Soc.* 83, 786 *C.* 1903 [2] 439).  
 $C_{10}H_8O_7$  5) 6-Oxybenzol-1,3-Dicarbonsäure-4-Methylcarbonsäure. Sm. 250 bis 255° (*B.* 37, 2121 *C.* 1904 [2] 438).  
 $C_{10}H_8S$  \*1) 1-Merkaptonaphtalin (*Bl.* [3] 29, 762 *C.* 1903 [2] 620).  
 $C_{10}H_8Se$  1) 1-Selenonaphtalin. *Fl.* (*Bl.* [3] 29, 763 *C.* 1903 [2] 620).  
 $C_{10}H_8N$  \*1) 1-Amidonaphtalin (*C. r.* 138, 1038 *C.* 1904 [1] 1490).  
 \*2) 2-Amidonaphtalin (*C. r.* 138, 1039 *C.* 1904 [1] 1490; *B.* 37, 2616 *C.* 1904 [2] 517).  
 \*8) 6-Methylchinolin. *Sd.* 258° (*C.* 1904 [2] 543).  
 $C_{10}H_9Cl$  4)  $\alpha$ -Chlor- $\alpha$ -Phenyl- $\alpha\beta$ -Butadien. *Sd.* 232—234° (*B.* 36, 775 *C.* 1903 [1] 835).  
 $C_{10}H_{10}O$  \*4) 2-Keto-1,2,3,4-Tetrahydronaphtalin (*B.* 36, 710 *C.* 1903 [1] 818).  
 \*5) 1-Keto-2-Methyl-2,3-Dihydroinden. *Fl.* (*Soc.* 83, 915 *C.* 1903 [2] 504).  
 \*14) Benzylidenaceton. +  $H_3PO_4$  (*C.* 1903 [2] 284).

- $C_{10}H_{10}O$  31) 2-Keto-1-Methyl-2,3-Dihydroinden. Sm. 62—63° (*A.* 336, 6 *C.* 1904 [2] 1466).
- 32) Aldehyd d.  $\beta$ -[4-Methylphenyl]akrylsäure. Sm. 41,5°; Sd. 154 bis 159°<sub>25</sub> (*B.* 36, 850 *C.* 1903 [1] 975).
- $C_{10}H_{10}O_2$  \*2) Isosafrol. Sd. 246—248°. Pikrat (*C.* 1904 [2] 954, 1568).
- \*8) Benzoylacetone (*B.* 36, 1837 *C.* 1903 [2] 192).
- \*12)  $\alpha$ -Phenylpropen- $\alpha$ -Carbonsäure. Sm. 136° (*B.* 36, 2254 *C.* 1903 [2] 437).
- \*25) Lakton d.  $\gamma$ -Oxy- $\gamma$ -Phenylbuttersäure. Sm. 37°; Sd. 123°<sub>2</sub> (*C.* 1904 [1] 1259).
- \*26) Dimethylphthalid. Sm. 67—68°; Sd. 274—275° (*B.* 37, 736 *C.* 1904 [1] 1078).
- 40) Methylenäther d.  $\beta$ -[3,4-Dioxyphenyl]propen. Sd. 238—239° (*C. r.* 139, 140 *C.* 1904 [2] 593).
- 41)  $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten (4-Oxybenzalacetone). Sm. 102—103° (*B.* 36, 134 *C.* 1903 [1] 458).
- 42) 1-[ $\alpha$ -Oxyäthyl]benzofuran. Sm. 37°; Sd. 145°<sub>15</sub> (*B.* 36, 2869 *C.* 1903 [2] 833).
- 43)  $\beta$ -Phenylpropen- $\alpha$ -Carbonsäure. Sm. 97—98,8°; Sd. 166—168°<sub>11</sub> (*B.* 37, 1092 *C.* 1904 [1] 1262; *C. r.* 138, 986 *C.* 1904 [1] 1439).
- 44) isom.  $\beta$ -Phenylpropen- $\alpha$ -Carbonsäure. Sm. 129°; Sd. 170—172°<sub>14</sub> (*C. r.* 138, 986 *C.* 1904 [1] 1439).
- 45) trans-1-Phenyl-R-Trimethylen-2-Carbonsäure. Sm. 105°. Ca + 2H<sub>2</sub>O, Ag (*B.* 36, 3784 *C.* 1904 [1] 42).
- 46) Aldehyd d.  $\beta$ -[4-Methoxyphenyl]akrylsäure. Sm. 58°; Sd. 173 bis 176°<sub>14</sub> (*B.* 36, 853 *C.* 1903 [1] 976).
- $C_{10}H_{10}O_3$  \*3) Methylenäther d. Äthyl-3,4-Dioxyphenylketon. Sm. 39° (*C.* 1904 [2] 1568).
- \*9)  $\gamma$ -Oxy- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure. Sm. 135° (*B.* 36, 2529 *C.* 1903 [2] 496).
- \*23)  $\beta$ -Benzoylpropionsäure. Sm. 116°. Ca (*M.* 24, 81 *C.* 1903 [1] 769).
- \*34) Lakton d. 1-Dioxymethylbenzoläthyläther-2-Carbonsäure. Sm. 64°; Sd. 255—260° (*M.* 25, 498 *C.* 1904 [2] 325).
- 56) Methylenäther d.  $\beta$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]propan. Sd. 156° (*A.* 332, 332 *C.* 1904 [2] 652).
- 57)  $\beta$ -Oxy- $\beta$ -Phenylakrylmethyläthersäure. Sm. 180° u. Zers. (*C. r.* 137, 261 *C.* 1903 [2] 664; *C. r.* 138, 287 *C.* 1904 [1] 719).
- 58) 1-Äthylbenzol-4-Ketocarbonsäure. Sm. 70—71° (*C. r.* 138, 558 *C.* 1903 [1] 832).
- 59) Dialdehyd d. 3-Oxy-1,4-Dimethylbenzol-2,6-Dicarbonsäure. Sm. 154° (*B.* 35, 4108 *C.* 1903 [1] 150).
- 60) Äthylester d. Benzol-1-Carbonsäure-2-Carbonsäurealdehyd. Sd. 240—243° u. Zers. (*M.* 25, 497 *C.* 1904 [2] 325).
- 61) Carbonat d. 3,4-Dioxy-1-Propylbenzol. Sd. 139—141°<sub>18</sub> (*C. r.* 138, 425 *C.* 1904 [1] 798).
- 62) Carbonat d. 3,4-Dioxy-1-Isopropylbenzol. Sm. 41°; Sd. 135—137°<sub>13</sub> (*C. r.* 138, 1703 *C.* 1904 [2] 436).
- 63) Verbindung (aus Isosafrol). Sd. 142°<sub>28</sub> (*B.* 36, 3580 *C.* 1903 [2] 1363).
- $C_{10}H_{10}O_4$  \*9)  $\beta$ -[3,4-Dioxyphenyl]propionmethylenäthersäure. Sm. 84—85° (*C.* 1904 [1] 879).
- \*18)  $\alpha$ -Phenyläthan- $\alpha$ - $\beta$ -Dicarbonsäure. Sm. 167°. K + H<sub>2</sub>O, Ag<sub>2</sub> (*M.* 24, 417 *C.* 1903 [2] 622; *B.* 37, 4069 *C.* 1904 [2] 1651; *Soc.* 85, 1365 *C.* 1904 [2] 1646).
- \*39)  $\alpha$ - $\gamma$ -Lakton d.  $\alpha$ - $\beta$ - $\gamma$ -Trioxy- $\gamma$ -Phenylbuttersäure. Sm. 116—117° (*B.* 37, 3127 *C.* 1904 [2] 1042).
- \*40) Mekonin (*Ar.* 241, 261 *C.* 1903 [2] 447).
- \*53) Dimethylester d. Benzol-1,4-Dicarbonsäure (*B.* 37, 2002 *C.* 1904 [2] 225).
- \*67)  $\beta$ -Dioxy- $\alpha$ - $\gamma$ -Diketo- $\alpha$ -Phenylbutan. Ba<sub>2</sub> (*B.* 36, 3226 *C.* 1903 [2] 940).
- 75) 4,6-Dioxy-1,3-Diacetylbenzol (*C.* 1904 [1] 1597).
- 76) Dimethyläther d. 5,6-Dioxy-2-Keto-1,2-Dihydrobenzofuran. Sm. 122° (*Soc.* 83, 137 *C.* 1903 [1] 90, 466).

- $C_{10}H_{10}O_4$  77) 5-Oxy-1-Methylbenzolmethyläther - 2 - Ketocarbonsäure +  $H_2O$ . Sm. 85° (*C.* 1904 [1] 1597).  
 78) 3-Oxy-1-Methylbenzolmethyläther - 4 - Ketocarbonsäure +  $H_2O$ . Sm. 101° (*C.* 1904 [1] 1597).  
 79) 6-Acetoxy-1-1-Methylbenzol-2-Carbonsäure. Sm. 144,5° (D.R.P. 91201). — \*II, 918.  
 80) Aldehyd d. 3-Acetoxy-4-Oxybenzol-4-Methyläther-1-Carbonsäure. Sm. 64° (*B.* 35, 4397 *C.* 1903 [1] 340).  
 81) 1-Methylester d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 143—145° (*M.* 24, 944 *C.* 1904 [1] 516).  
 82) 2-Methylester d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 96—98° (*M.* 24, 939 *C.* 1904 [1] 515).  
 83) Monophenylester d. Bernsteinsäure. Sm. 98° (*B.* 35, 4076 *C.* 1903 [1] 73).
- $C_{10}H_{10}O_5$  \*5) 3,4-Dioxybenzoldimethyläther-1-Ketocarbonsäure. Sm. 138—139° (wasserfrei). K, Pb, Cu + 5 $H_2O$ , Ag (*C.* 1904 [1] 511).  
 \*19) 4-Oxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 163° (*C.* 1904 [1] 1597).  
 \*20) 2-Oxybenzoldimethyläther-1,4-Dicarbonsäure. Sm. 254° (*C.* 1904 [1] 1597).  
 44) Isoanemonsäure (*Ar.* 230, 193). — \*III, 456.  
 45)  $\beta$ -Ketopropylester d. 3,5-Dioxybenzol-1-Carbonsäure +  $H_2O$ . Sm. 97° (D.R.P. 73700). — \*II, 1030.  
 46) Verbindung (aus  $\beta\gamma\delta$ -Triketopentan). Sm. 119° (*B.* 36, 3230 *C.* 1903 [2] 941).
- $C_{10}H_{10}O_6$  \*3) Dillölapiolsäure (*Ar.* 242, 341 *C.* 1904 [2] 525).  
 32) 6-Oxy-3-Methylphenyltartronsäure. K<sub>2</sub> (D.R.P. 115817 *C.* 1901 [1] 72). — \*II, 1165.
- $C_{10}H_{10}O_7$  4) Pyrogalloldiglykolsäure (D.R.P. 155568 *C.* 1904 [2] 1443).  
 5) 3,4-Dioxyphenyltartron-3-Methyläthersäure. K<sub>2</sub> (D.R.P. 115817 *C.* 1901 [1] 72). — \*II, 1194.
- $C_{10}H_{10}N_2$  \*6) 1,5-Diamidonaphtalin. Sm. 189—190° (*C.* 1904 [1] 461; *J. pr.* [2] 69, 84 *C.* 1904 [1] 812).  
 \*9) 1,8-Diamidonaphtalin. Sm. 66—67° (*C.* 1904 [1] 461).  
 \*12) 2,7-Diamidonaphtalin (*J. pr.* [2] 69, 89 *C.* 1904 [1] 813).  
 \*15) 3-Methyl-1-Phenylpyrazol. Sm. 35° (*B.* 36, 3988 *C.* 1904 [1] 171).  
 \*19) 3-Methyl-5-Phenylpyrazol. Sm. 127—127,5° (*C. r.* 136, 1264 *C.* 1903 [2] 122).  
 \*27) 1-Methyl-2-[3-Pyridyl]pyrrol (Nikotyrin). Sd. 276° (272—274°) (*C. r.* 137, 861 *C.* 1904 [1] 104; *B.* 37, 1226 *C.* 1904 [1] 1278).
- $C_{10}H_{10}N_4$  6) 1-Benzylidenamido-5-Methyl-1,2,3-Triazol. Sm. 67—68° (*B.* 36, 3617 *C.* 1903 [2] 1381).  
 7) Nitril d. 1,4-Phenylendi[Amidoessigsäure]. Sm. 170—171° (D.R.P. 145062 *C.* 1903 [2] 1036).
- $C_{10}H_{10}Br_2$  2)  $\alpha\delta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -Buten. Sm. 94° (*B.* 36, 1404 *C.* 1903 [1] 1347; *B.* 36, 4325 *C.* 1904 [1] 453).
- $C_{10}H_{10}Br_4$  \*3) 2,3,5,6-Tetrabrom-1,4-Diäthylbenzol. Sm. 112° (*B.* 36, 1633 *C.* 1903 [2] 25).  
 \*6)  $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha$ -Phenylbutan. Sm. 151° (*B.* 36, 1406 *C.* 1903 [1] 1348; *B.* 36, 4325 *C.* 1904 [1] 453).  
 7) isom.  $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha$ -Phenylbutan. Sm. 76° (*B.* 36, 1406 *C.* 1903 [1] 1348).
- $C_{10}H_{11}N$  \*21) Nitril d. 1,3,5-Trimethylbenzol-2-Carbonsäure. Sm. 53° (*B.* 36, 331 *C.* 1903 [1] 576).
- $C_{10}H_{11}N_3$  \*7) 5-Imido-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 116° (*B.* 36, 3271 *C.* 1903 [2] 1188; *B.* 36, 3279 *C.* 1903 [2] 1189).  
 17) 2-Phenylazo-1-Methylpyrrol. Sd. 140°<sub>21</sub>. Pikrat (*G.* 32 [2] 464 *C.* 1903 [1] 839).
- $C_{10}H_{11}Cl$  3) p-Chlor-1,2,3,4-Tetrahydronaphtalin. Sd. 230° u. Zers. (*C. r.* 139, 673 *C.* 1904 [2] 1654).
- $C_{10}H_{11}Br$  3)  $\gamma$ -Brom- $\beta$ -Phenyl- $\beta$ -Buten. Sd. 114—116°<sub>13</sub> (*B.* 37, 233 *C.* 1904 [1] 660).  
 4) 5-Brom-1,2,3,4-Tetrahydronaphtalin. Sd. 255—257° (*Soc.* 85, 729 *C.* 1904 [2] 116, 333).

- $C_{10}H_{11}Br$  5) 6-Brom-1,2,3,4-Tetrahydronaphtalin. *Sd.* 238—239<sup>758</sup> (*Soc.* 85, 729 *C.* 1904 [2] 116, 338).  
 6) p-Brom-1,2,3,4-Tetrahydronaphtalin. *Sd.* 250° u. Zers. (*C. r.* 139, 673 *C.* 1904 [2] 1654).
- $C_{10}H_{11}Br_3$  8) 2,5,6-Tribrom-4-Aethyl-1,3-Dimethylbenzol. *Sm.* 135° (*B.* 36, 1639 *C.* 1903 [2] 26).  
 9) 3,4,5-Tribrom-2-Aethyl-1,4-Dimethylbenzol. *Sm.* 89° (*B.* 36, 1640 *C.* 1903 [2] 27).
- $C_{10}H_{11}J$  1)  $\beta$ -[4-Jodphenyl]- $\beta$ -Buten. *Sm.* 45—46°; *Sd.* 155<sup>23</sup> (*B.* 35, 2642 *C.* 1902 [2] 586).
- $C_{10}H_{12}O$  \*6) Methyläther d. 4-Oxy-1-Allylbenzol. *Sd.* 108—114<sup>25</sup> (215—216°) (*D. R. P.* 154654 *C.* 1904 [2] 1355; *C. r.* 139, 482 *C.* 1904 [2] 1038).  
 \*7) Methyläther d. 2-Oxy-1-Propenylbenzol. *Sd.* 222° (*B.* 36, 1188 *C.* 1903 [1] 1179).  
 \*15) Aethyläther d.  $\beta$ -Oxy- $\alpha$ -Phenyläthen. *Sd.* 225—226° (*C. r.* 138, 288 *C.* 1904 [1] 720; *Bl.* [3] 31, 527 *C.* 1904 [1] 1552).  
 \*27) Methyl-2,4-Dimethylphenylketon. +  $H_2SO_4$  (*R.* 21, 355 *C.* 1903 [1] 151).  
 \*30) 2-Methyl-3,4-Dihydro-1,2-Benzpyran. *Sm.* 223° (*B.* 36, 2872 *C.* 1903 [2] 833).  
 \*32) Aldehyd d.  $\alpha$ -[4-Methylphenyl]äthan- $\alpha$ -Carbonsäure. *Sd.* 219—221° (*C. r.* 137, 1261 *C.* 1904 [1] 445).  
 \*37) Aldehyd d. 1,3,5-Trimethylbenzol-2-Carbonsäure (*Soc.* 85, 219 *C.* 1904 [1] 656, 939).  
 \*41) Aethyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. *Sd.* 209—210° (*C. r.* 138, 287 *C.* 1904 [1] 719; *Bl.* [3] 31, 525 *C.* 1904 [1] 1552).  
 \*43) Methyläther d.  $\beta$ -[4-Oxyphenyl]propen. *Sm.* 32°; *Sd.* 222° (*C. r.* 139, 140 *C.* 1904 [2] 593; *B.* 37, 3995 *C.* 1904 [2] 1640).  
 49) Methyläther d.  $\beta$ -[2-Oxyphenyl]propen (o-Pseudonisol). *Sd.* 198—199° (*C. r.* 139, 140 *C.* 1904 [2] 593).  
 50) Methyläther d.  $\beta$ -[3-Oxyphenyl]propen. *Sd.* 215—216° (*C. r.* 139, 140 *C.* 1904 [2] 593).  
 51) Aethyläther d. 4-Oxyphenyläthen. *Sd.* 108—110<sup>12</sup> (*B.* 36, 3594 *C.* 1903 [2] 1366).  
 52) 4,6-Dimethyl-1,2-Dihydrobenzofuran. *Fl.* (*B.* 36, 2877 *C.* 1903 [2] 634).
- $C_{10}H_{12}O_2$  \*3) Eugenol (*J. pr.* [2] 68, 237 *C.* 1903 [2] 1063).  
 \*20) Aethyläther d. Methyl-4-Oxyphenylketon. *Sd.* 158—161<sup>16</sup> (*B.* 36, 3593 *C.* 1903 [2] 1366).  
 \*28)  $\gamma$ -Phenylbuttersäure. *Sm.* 47—48° (*C. r.* 138, 1049 *C.* 1904 [1] 1493).  
 \*29) i- $\alpha$ -Phenylpropan- $\beta$ -Carbonsäure. *Sm.* 37°; *Sd.* 160—161<sup>17</sup>. *Ag* (*Soc.* 83, 915 *C.* 1903 [2] 504; *Soc.* 83, 1006 *C.* 1903 [2] 663).  
 \*30)  $\alpha$ -[4-Methylphenyl]propionsäure (*B.* 36, 769 *C.* 1903 [1] 836).  
 \*46) 1,2,4-Trimethylbenzol-5-Carbonsäure. +  $H_2SO_4$  (*R.* 21, 352 *C.* 1903 [1] 150).  
 \*48) 1,3,5-Trimethylbenzol-2-Carbonsäure. Salze siehe (*Soc.* 85, 240 *C.* 1904 [1] 1006).  
 \*55) Aethylester d. Phenyllessigsäure (*B.* 36, 3688 *C.* 1903 [2] 1004).  
 \*73) Aethyl-6-Oxy-3-Methylphenylketon. *Sm.* —2°; *Sd.* 135—140<sup>23</sup> (*B.* 36, 3892 *C.* 1904 [1] 93).  
 \*84) Methyläther d. Aethyl-2-Oxyphenylketon. *Sd.* 137<sup>18</sup> (*B.* 36, 2585 *C.* 1903 [2] 621).  
 \*87) d- $\alpha$ -Phenylpropan- $\beta$ -Carbonsäure. *Fl.* Chininsalz (*Soc.* 83, 1007 *C.* 1903 [2] 663).  
 92) 3-Methyläther d.  $\beta$ -[3,4-Dioxyphenyl]propen. *Sd.* 257—258° (*C. r.* 139, 140 *C.* 1904 [2] 593).  
 93) Methyläther d.  $\beta$ -Keto- $\alpha$ -[4-Oxyphenyl]propan. *Sd.* 141° (i. V.) (*A.* 332, 323 *C.* 1904 [2] 651).  
 94) Methyläther d. Methyl-4-Oxy-2-Methylphenylketon. *Sm.* 12°; *Sd.* 268<sup>760</sup> (*C.* 1904 [1] 1597).  
 95) Methyläther d. Methyl-2-Oxy-4-Methylphenylketon. *Sm.* 37,2°; *Sd.* 265<sup>764</sup> (*C.* 1904 [1] 1597).  
 96) Aethyläther d. Oxymethylphenylketon. *Sd.* 134—136<sup>21</sup> (*C. r.* 138, 91 *C.* 1904 [1] 505).

- $C_{10}H_{12}O_2$  97) 1-[ $\alpha$ -Oxyäthyl]-1,2-Dihydrobenzofuran. Sd. 142°<sub>15</sub> (B. 36, 2870 C. 1903 [2] 833).  
 98) Rheosmin. Sm. 79,5° (C. 1903 [1] 883; C. r. 136, 386 C. 1903 [1] 722).  
 99) Aldehyd d. 6-Oxy-1-Methylbenzoläthyläther-2-Carbonsäure. Sd. 258—260° (B. 31, 1151). — \*III, 65.
- 100) Acetat d. 4-Oxymethyl-1-Methylbenzol. Sd. 227° (B. 37, 1466 C. 1904 [1] 1342).
- $C_{10}H_{12}O_3$  \*11) 3-Oxy-5-Isopropyl-2-Methyl-1,4-Benzochinon. Sm. 170° (A. 336, 29 C. 1904 [2] 1467).  
 \*13) Methyläther d. 5-Oxy-2-Propyl-1,4-Benzochinon. Sm. 111° (B. 36, 859 C. 1903 [1] 1084; Ar. 242, 99 C. 1904 [1] 1008).  
 \*51) 3-Oxy-1-Methylbenzoläthyläther-4-Carbonsäure. Sm. 78,5° (C. 1904 [1] 1597).  
 \*66) Aethylester d.  $\alpha$ -Oxyphenylelessigsäure (C. 1903 [2] 199).  
 \*94) 5-Oxy-1-Methylbenzoläthyläther-2-Carbonsäure. Sm. 146° (C. 1904 [1] 1597).  
 104) 3,4-Methylenäther d. 3,4-Dioxy-1-[ $\alpha$ -Oxypropyl]benzol. Sd. 172 bis 175° (C. 1904 [2] 1568).  
 105) 4,5-Methylenäther d. 2,4,5-Trioxy-1-Propylbenzol. Sm. 71—72° (Ar. 242, 90 C. 1904 [1] 1007).  
 106)  $\alpha$ -Oxyisopropyl-4-Oxyphenylketon. Sm. 97—98° (D.R.P. 80986). — \*III, 120.  
 107) Methyläther d. 6-Oxy-2-Propyl-1,4-Benzochinon. Sm. 79° (B. 36, 1719 C. 1903 [2] 114; Ar. 242, 347 C. 1904 [2] 525).  
 108) Dimethyläther d. Methyl-2,5-Dioxyphenylketon. Sd. 156—158°<sub>15</sub> (B. 37, 3996 C. 1904 [2] 1641).  
 109) Dimethyläther d. Methyl-3,5-Dioxyphenylketon. Sd. 290—291° (B. 36, 2302 C. 1903 [2] 578).  
 110)  $\alpha$ -Phenylbutan- $\beta\gamma$ -Ozonid. Sd. 80—100°<sub>11-12</sub> (B. 37, 843 C. 1904 [1] 1144).  
 111) 1- $\alpha$ -Oxy- $\alpha$ -Phenylbuttersäure. Zn, Ag (Soc. 85, 1258 C. 1904 [2] 1304).  
 112) Aldehyd d. 4,5-Dioxy-1-Methylbenzol-4-Aethyläther-1-Carbonsäure. Sm. 91° (D.R.P. 91170). — \*III, 77.  
 113) Aldehyd d. 3,4-Dioxybenzol-3-Propyläther-1-Carbonsäure. Sm. 82° (D.R.P. 85196). — \*III, 74.
- $C_{10}H_{12}O_4$  \*4) 3,4-Dimethyläther d. Methyl-2,3,4-Trioxyphenylketon. Sm. 78 bis 79° (B. 36, 127 C. 1903 [1] 468; Soc. 83, 132 C. 1903 [1] 89, 466).  
 \*30) Rhizoninsäure (J. pr. [2] 68, 16 C. 1903 [2] 511).  
 \*39) Methyl ester d. 3,5-Dioxybenzoldimethyläther-1-Carbonsäure. Sm. 41° (81°?) (B. 35, 3902 C. 1903 [1] 27).  
 \*43) Dimethylester d. cis-1,4-Dihydrobenzol-1,4-Dicarbonsäure (B. 36, 2857 C. 1903 [2] 1129).  
 \*54)  $\alpha$ -Benzoat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 36°; Sd. 124° (B. 36, 1573 C. 1903 [2] 225; B. 36, 4341 C. 1904 [1] 433).  
 66) 3,4-Methylenäther d. 3,4-Dioxy-1-[ $\alpha\beta$ -Dioxypropyl]benzol. Sm. 101 bis 102° (B. 24, 3490; B. 36, 3580 C. 1903 [2] 1363).  
 67) Propyl-2,3,4-Trioxyphenylketon + xH<sub>2</sub>O. Sm. 76—80° (100° wasserfrei) (D.R.P. 49149, 50451). — \*III, 119.  
 68) 3,6-Dioxy-2,5-Diäthyl-1,4-Benzochinon. Sm. 217—218° (B. 37, 2385 C. 1904 [2] 307).  
 69) 3,5-Dioxy-1-Methylbenzoldimethyläther-2-Carbonsäure. Zers. bei 178° (M. 24, 897 C. 1904 [1] 512).  
 70) 3,5-Dioxy-1-Methylbenzoldimethyläther-4-Carbonsäure. Sm. 140° u. Zers. (M. 24, 901 C. 1904 [1] 513).  
 71) 4-Oxy-1-Oxymethylbenzol-1-Aethyläther-3-Carbonsäure. Sm. 74° (D.R.P. 113512 C. 1900 [2] 796). — \*II, 1032.  
 72) 2-Methyl-R-Penten-5-Carbonsäure-4-[Aethyl- $\beta$ -Carbonsäure]. Sm. 218° (B. 36, 947 C. 1903 [1] 1021).  
 73) Aldehyd d. 2,4,6-Trioxybenzoltrimethyläther-1-Carbonsäure. Sm. 118° (M. 24, 863, 866 C. 1904 [1] 367).  
 74) Methyl ester d. 3,5-Dioxy-1,4-Dimethylbenzol-2-Carbonsäure (Atrarsäure; Physcianin; Ceratophyllin). Sm. 143° (G. 12, 257; A. 119, 365; 284, 189; 288, 48; 295, 225; B. 30, 359, 1985; J. pr. [2] 57, 287). — II, 2083; III, 642; \*II, 1036.

- $C_{10}H_{12}O_4$  75) Methylester d. 3,5-Dioxy-1-Methylbenzol-2-Methyläther-2-Carbonsäure. Sm. 95—97° (*M.* 24, 896 *C.* 1904 [1] 512).  
 76) Methylester d. 3,5-Dioxy-1-Methylbenzol-3-Methyläther-4-Carbonsäure. Sm. 63—65° (*M.* 24, 899 *C.* 1904 [1] 512).  
 77) Methylester d. 2,4-Dioxybenzoldimethyläther-1-Carbonsäure. Sd. 294—296° (*C.* 1903 [1] 580; *Soc.* 85, 159 *C.* 1904 [1] 724; *M.* 24, 889 *C.* 1904 [1] 512).  
 78) Aethoxymethylester d. 2-Oxybenzol-1-Carbonsäure. Sd. 168 bis 169<sub>43</sub> (D.R.P. 137585 *C.* 1903 [1] 112).  
 79) 2-Oxybenzoat d.  $\alpha\alpha$ -Dioxyäthan- $\alpha$ -Methyläther (Methoxyäthyliden-salicylat). Fl. (D.R.P. 146849 *C.* 1903 [2] 1353).
- $C_{10}H_{12}O_5$  \*9) 3,4,5-Trioxybenzoltrimethyläther-1-Carbonsäure. Sm. 167—169° (*M.* 25, 511 *C.* 1904 [2] 1118).  
 \*16) Lakton d.  $\beta$ -Diacetylbernsteinsäuremonoäthylester. Sm. 110° (*B.* 37, 3491 *C.* 1904 [2] 1289).  
 \*17) Methylester d. 3,4,5-Trioxybenzol-3,5-Dimethyläther-1-Carbonsäure +  $H_2O$ . Sm. 83—84° (106° wasserfrei) (*B.* 36, 217 *C.* 1903 [1] 455).  
 \*29) Aethylester d. 5-Oxy-1,4-Pyronäthyläther-2-Carbonsäure (*G.* 33 [2] 264 *C.* 1904 [1] 44).  
 \*31) 2,4,6-Trioxybenzoltrimethyläther-1-Carbonsäure. Sm. 142—144° u. Zers. (*M.* 24, 873 *C.* 1904 [1] 368).  
 37)  $\alpha$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]essig-3,4-Dimethyläthersäure. Sm. 105°. K, Ba, Pb, Cu, Ag (*C.* 1904 [1] 511).  
 38) Methylester d. 2,3,4-Trioxybenzol-3,4-Dimethyläther-1-Carbonsäure. Sm. 75—78° (*B.* 36, 660 *C.* 1903 [1] 710; *M.* 25, 509, 511 *C.* 1904 [2] 1118).  
 39) Methylester d. 3,4,5-Trioxybenzol-3,4-Dimethyläther-1-Carbonsäure. Sm. 84° (81—83°) (*B.* 36, 217 *C.* 1903 [1] 455; *B.* 36, 660 *C.* 1903 [1] 710; *M.* 25, 519 *C.* 1904 [2] 1118).
- $C_{10}H_{12}O_8$  9) cis-Hexahydrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 138—140° (*Soc.* 83, 786 *C.* 1903 [2] 201, 439).  
 10) trans-Hexahydrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 175° (*Soc.* 83, 784 *C.* 1903 [2] 201, 439).
- $C_{10}H_{12}N_2$  \*18) 1-Methyl-2-[3-Pyridyl]-2,3-Dihydropyrrol (Dihydronekolyrin). Sd. 248° (*C. r.* 137, 861 *C.* 1904 [1] 104).  
 35) Nitril d.  $\alpha$ -[Methylphenylamido]propionsäure. Sm. 212° (*B.* 36, 758 *C.* 1903 [1] 962).  
 36) Nitril d. Aethylphenylamidoessigsäure. Sm. 24° (21°); Sd. 183°<sub>20</sub> (D.R.P. 142559 *C.* 1903 [2] 81; *B.* 37, 4083 *C.* 1904 [2] 1723).  
 37) Nitril d. 2,4-Dimethylphenylamidoessigsäure. Sm. 50—52° (*B.* 37, 4082 *C.* 1904 [2] 1723).
- $C_{10}H_{12}Br_2$  \*4)  $\alpha\beta$ -Dibrombutylbenzol. Sm. 70—71° (*B.* 36, 774 *C.* 1903 [1] 835).  
 \*14) 4,6-Dibrom-1,2,3,5-Tetramethylbenzol. Sm. 199° (*B.* 37, 1717 *C.* 1904 [1] 1489).  
 \*17)  $\beta\gamma$ -Dibrombutylbenzol. Fl. (*B.* 37, 2311 *C.* 1904 [2] 216).  
 20) 4-[ $\alpha\beta$ -Dibromäthyl]-1-Aethylbenzol. Sm. 66° (*B.* 36, 1633 *C.* 1903 [2] 25).  
 21) 2-[ $\alpha\beta$ -Dibromäthyl]-1,4-Dimethylbenzol. Sm. 55° (*B.* 36, 1639 *C.* 1903 [2] 27).
- $C_{10}H_{13}N$  \*13) 1-Methyl-1,2,3,4-Tetrahydrochinolin. Sd. 245,5—247°<sub>224</sub>. HJ, Pikrat (*B.* 36, 2569 *C.* 1903 [2] 727; *B.* 36, 3799 *C.* 1904 [1] 21).  
 34)  $\gamma$ -Amido- $\alpha$ -Phenyl- $\alpha$ -Buten. Sd. 119°<sub>12</sub>. Oxalat (*B.* 36, 3002 *C.* 1903 [2] 949).  
 35)  $\gamma$ -Amido- $\alpha$ -Phenyl- $\beta$ -Methylpropen. Sd. 230°. (2HCl, PtCl<sub>4</sub>) (*C.* 1904 [1] 1496).  
 36)  $\gamma$ -[2-Methylphenyl]amidopropen (Allyl-2-Methylphenylamin). Sd. 225 bis 230° (*B.* 37, 3896 *C.* 1904 [2] 1612).  
 37)  $\gamma$ -[4-Methylphenyl]amidopropen (Allyl-4-Methylphenylamin). Sd. 232—234°. HCl, Oxalat (*B.* 37, 2720 *C.* 1904 [2] 592).  
 38) d-1-Amido-2-Methyl-2,3-Dihydroinden. d-Bromcamphersulfonat, d-Chlorcamphersulfonat, Ditartrat (*Soc.* 83, 931 *C.* 1903 [2] 505; *Soc.* 85, 171 *C.* 1904 [1] 380, 809).

- $C_{10}H_{13}N$  39) 1-1-Amido-2-Methyl-2,3-Dihydroinden. d-Bromcamphersulfonat, d-Chlorcamphersulfonat, Ditartrat (*Soc.* 83, 930 *C.* 1903 [2] 505; *Soc.* 85, 171 *C.* 1904 [1] 380, 809).
- 40) d-1-1-Amido-2-Methyl-2,3-Dihydroinden. Fl. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, Pikrat (*C.* 1901 [2] 421; *Soc.* 83, 916 *C.* 1903 [2] 505; *Soc.* 83, 925 *C.* 1903 [2] 505).
- 41) d-1-neo-1-Amido-2-Methyl-2,3-Dihydroinden. Fl. HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat, d-Bromcamphersulfonat (*Soc.* 83, 916 *C.* 1903 [2] 505; *Soc.* 83, 927 *C.* 1903 [2] 505).
- $C_{10}H_{13}Cl$  15)  $\alpha$ -Chlor- $\alpha$ -Phenylbutan. Sd. 94°<sub>20</sub> (*B.* 37, 2312 *C.* 1904 [2] 216).
- 16)  $\beta$ -Chlor- $\alpha$ -Phenyl- $\beta$ -Methylpropan. Fl. (*B.* 37, 1723 *C.* 1904 [1] 1515).
- $C_{10}H_{14}O$  \*1)  $\alpha$ -Oxy- $\alpha$ -Phenylbutan. Sd. 110°<sub>15</sub> (*B.* 37, 2312 *C.* 1904 [2] 216).
- \*6) 4-Oxy-1-tert. Butylbenzol (*A.* 327, 203 *C.* 1903 [1] 1407; *Soc.* 83, 329 *C.* 1903 [1] 875).
- \*26) Methyläther d. 4-Oxy-1-Propylbenzol (*B.* 37, 3987 *C.* 1904 [2] 1639).
- \*30) Methyläther d. 4-Oxy-1-Isopropylbenzol. Sd. 212—213°<sub>756</sub> (*B.* 37, 3996 *C.* 1904 [2] 1640).
- \*37) Aethyläther d. 4-Oxy-1-Aethylbenzol. Sd. 208°<sub>780</sub> (*B.* 36, 3594 *C.* 1903 [2] 1366).
- \*50) Eucarvon. Sm. 98—101°<sub>17</sub> (*B.* 36, 237 *C.* 1903 [1] 515).
- \*58)  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Methylpropan. Sm. 24°; Sd. 214—216° (*C.* 1904 [1] 1496; *B.* 37, 1723 *C.* 1904 [1] 1515).
- 74) 2-[ $\beta$ -Oxyäthyl]-1,4-Dimethylbenzol. Sd. 229°<sub>759</sub> (*B.* 36, 1639 *C.* 1903 [2] 26).
- 75) isom.  $\gamma$ -Oxy- $\alpha$ -Phenylbutan. Sd. 236—238° (*B.* 37, 2313 *C.* 1904 [2] 217).
- 76) Aethyläther d. 2-Methyl-1-Oxymethylbenzol. Sd. 202—203° (*D.R.P.* 154658 *C.* 1904 [2] 1355).
- 77) Umbellon. Sd. 219—220° (*Soc.* 85, 634 *C.* 1904 [1] 1607 *C.* 1904 [2] 333).
- 78) Keton (aus Pinen). Sd. 206—207°<sub>774</sub> (*C.* 1903 [2] 372; *Soc.* 83, 1304 *C.* 1904 [1] 95).
- $C_{10}H_{14}O_2$  \*21)  $\beta$ -[3,5-Diketo-4-Methylhexahydrophenyl]propen. Sm. 187—188° (*A.* 330, 266 *C.* 1904 [1] 947).
- 46)  $\gamma$ -Oxy- $\alpha$ -[2-Oxyphenyl]butan. Sm. 65°; Sd. 188—192°<sub>15</sub> (*B.* 36, 2871 *C.* 1903 [2] 833).
- 47)  $\alpha\beta$ -Dioxy- $\beta$ -[4-Methylphenyl]propan. Sm. 36° (*C. r.* 137, 1261 *C.* 1904 [1] 445).
- 48) 4-Methyläther d.  $\alpha$ -Oxy- $\alpha$ -[4-Oxyphenyl]propan. Sd. 140—143°<sub>16</sub> (*B.* 37, 4188 *C.* 1904 [2] 1642).
- 49) 3-Methyläther d. 3,5-Dioxy-1-Propylbenzol. Sd. 160—161°<sub>17</sub> (*B.* 36, 3449 *C.* 1903 [2] 1176).
- 50) Dimethyläther d.  $\alpha\alpha$ -Dioxy- $\alpha$ -Phenyläthan (*B.* 31, 1012). — \*III, 91.
- 51) 4-Aethyläther d. 4-Oxy-1-[ $\alpha$ -Oxyäthyl]benzol. Sm. 48°; Sd. 140 bis 142°<sub>11</sub> (*B.* 36, 3593 *C.* 1903 [2] 1366).
- 52) 4-Keto-6-Oxy-5-Methyl-2-Isopropyliden-1,2,3,4-Tetrahydrobenzol. Sm. 157° (*A.* 330, 272 *C.* 1904 [1] 948).
- 53) Säure (aus Lorbeerblätternöl). Sm. 146—147° (*Ar.* 242, 167 *C.* 1904 [1] 1351).
- 54) Laktone d.  $\delta$ -Oxy- $\alpha\zeta$ -Heptadien- $\delta$ -[Aethyl- $\beta$ -Carbonsäure] (Diallyl-butyrolaktone). Sd. 266—267° (*C.* 1904 [1] 1330).
- 55) Methyl ester d.  $\beta$ -Methyl- $\beta\zeta$ -Heptenin- $\eta$ -Carbonsäure. Sd. 114—125°<sub>23</sub> (*C. r.* 136, 554 *C.* 1903 [1] 825).
- $C_{10}H_{14}O_3$  \*13) 2,4-Diketo-6-Oxy-1,1,3,3-Tetramethyl-1,2,3,4-Tetrahydrobenzol. Sm. 190° (*M.* 24, 112 *C.* 1903 [1] 967).
- 39) 3-Methyläther d. 2,3,5-Trioxy-1-Propylbenzol. Sm. 107° (*B.* 36, 1719 *C.* 1903 [2] 114; *Ar.* 242, 347 *C.* 1904 [2] 525).
- 40) 4-Methyläther d. 2,4,5-Trioxy-1-Propylbenzol. Sm. 92° (*B.* 36, 859 *C.* 1903 [1] 1084).
- 41) 5-Acetyl-6-Oxy-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 36°; Sd. 127—128°<sub>14</sub>. Cu (*B.* 37, 3380 *C.* 1904 [2] 1219).
- 42) 6-Methyläther d. 4,6-Dioxy-2-Keto-1,1,5-Trimethyl-1,2-Dihydrobenzol. Sm. 179—180° (*M.* 24, 110 *C.* 1903 [1] 967).
- 43) Säure (aus d. Verb.  $C_{10}H_{16}O_2$ ). Sm. 197—198° (*B.* 37, 1034 *C.* 1904 [1] 1262).

- $C_{10}H_{14}O_3$  44) Anhydrid d.  $\beta\epsilon$ -Dimethyl- $\gamma$ -Hexen- $\beta\epsilon$ -Dicarbonsäure. Sd. 116—120°<sub>20</sub> (Soc. 83, 1385 C. 1904 [1] 434).  
 45) Anhydrid d. Homotanacetondicarbonsäure. Sd. 157—158°<sub>15</sub> (B. 36, 4369 C. 1904 [1] 455).  
 46) Acetat d. 6-Oxy-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sd. 144°<sub>18</sub> (B. 37, 3379 C. 1904 [2] 1219).
- $C_{10}H_{14}O_4$  \*41) Säure (aus Citral). Sm. 192—194° (C. 1903 [2] 1081).  
 43)  $\beta\beta$ -Dioxyisopropylphenylketon +  $H_2O$ . Sm. 116° (B. 36, 1356 C. 1903 [1] 1299).  
 44)  $\beta\epsilon$ -Dimethyl- $\beta\delta$ -Hexadien- $\gamma\delta$ -Dicarbonsäure. Sm. 231° u. Zers.  $K_2$ ,  $Ag_2$  (J. pr. [2] 67, 197 C. 1903 [1] 869).  
 45) r-Dehydrocamphersäure. Sm. 221—223° (B. 36, 4334 C. 1904 [1] 456).  
 46) Säure (aus 2,3,4,5-Tetrahydro-R-Hepten-6-Carbonsäureäthylester). Sm. 231° (B. 37, 936 C. 1904 [1] 1072).  
 47) isom. Säure (aus 2,3,4,5-Tetrahydro-R-Hepten-6-Carbonsäureäthylester). Sm. 132° (B. 37, 936 C. 1904 [1] 1072).
- $C_{10}H_{14}O_5$  \*12) Diäthylester d.  $\alpha$ -Keto- $\beta$ -Buten- $\alpha\gamma$ -Dicarbonsäure. Sd. 182—184°<sub>28</sub> (R. 23, 151 C. 1904 [2] 194).  
 19)  $\gamma$ -Oxy- $\beta\epsilon$ -Diketo- $\gamma\delta$ -Diacetylhexan. Sm. 112° (B. 36, 3227 C. 1903 [2] 940).  
 25) Anemonolsäure. Sm. 151—153° (M. 20, 640). — \*III, 456.
- $C_{10}H_{14}O_6$  3) Acetat d. Formalmethylenfruktosid. Fl. (R. 22, 163 C. 1903 [2] 108).  
 $C_{10}H_{14}O_8$  \*1) Hexan- $\alpha\gamma\delta\zeta$ -Tetracarbonsäure.  $Ag_4$  (C. 1903 [1] 628; Soc. 85, 614 C. 1904 [1] 1553).  
 11) Glutarperoxyd. Sm. 108° u. Zers. (Am. 32, 65 C. 1904 [2] 766).
- $C_{10}H_{14}N_2$  \*11) 5,8-Diamido-1,2,3,4-Tetrahydronaphtalin (Soc. 85, 754 C. 1904 [2] 448).  
 \*21) d-1-Methyl-2-[3-Pyridyl]tetrahydropyrol (Nikotin). Tartrat (C. 1903 [2] 123; C. r. 137, 862 C. 1904 [1] 104; Ph. Ch. 47, 113 C. 1904 [1] 589; B. 37, 1232 C. 1904 [1] 1278; B. 37, 2429 C. 1904 [2] 442).  
 \*30) Nitril d. Camphersäure (C. 1903 [1] 837).  
 \*33) i-Nikotin. Sd. 242—243° (2HCl,  $PtCl_4 + H_2O$ ) (C. r. 137, 862 C. 1904 [1] 104; B. 37, 1227 C. 1904 [1] 1278).  
 37) i-Nikotin. Tartrat (C. r. 137, 862 C. 1904 [1] 104; B. 37, 1230 C. 1904 [1] 1278).
- $C_{10}H_{16}N$  \*47) Nitril d. r- $\alpha$ -Campholensäure. Sd. 228° (C. r. 138, 696 C. 1904 [1] 1087).  
 61)  $\gamma$ -Amidobutylbenzol. Sd. 221—222°<sub>750</sub>. HCl,  $H_3PO_4$ , Oxalat (B. 36, 2999 C. 1903 [2] 949).  
 62) 2-Methylamido-1,3,5-Trimethylbenzol. Sd. 228—229°<sub>730</sub> (A. 327, 110 C. 1903 [1] 1213).  
 63) 4-Methyläthylamido-1-Methylbenzol (Methyläthyl-4-Methylphenylamin). Sd. 218—220°. Pikrat (B. 37, 2716 C. 1904 [2] 591).  
 64) Nitril d. 1,1,3-Trimethyl-1,2,3,4-Tetrahydrobenzol-5-Carbonsäure<sup>p</sup> Sd. 220—221°<sub>760</sub> (D.R.P. 141699 C. 1903 [1] 1245).
- $C_{10}H_{16}O$  \*7) d-Campher (C. 1903 [1] 1223; B. 37, 511 C. 1904 [1] 884).  
 \*19) Dihydrocarboxyd (Isodihydrocarvon). Sd. 199° (B. 36, 765 C. 1903 [1] 836).  
 \*21) d-Fenchon (C. 1904 [1] 282).  
 \*26) Myristicol (C. 1904 [1] 593).  
 \*30) 3-Keto-4-Isopropyliden-1-Methylbenzol (Pulegon) (A. 329, 108 C. 1903 [2] 1071).  
 \*56)  $\beta$ -Cyklocitral (D.R.P. 138141 C. 1903 [1] 267; D.R.P. 139957 C. 1903 [1] 857).  
 \*68) Aldehyd d. Camphenilansäure (Camphenol). Sm. 68—70° (L. 37, 197 C. 1903 [1] 594).  
 \*71)  $\alpha$ -Cyklocitral. Sd. 90—95°<sub>20</sub> (D.R.P. 138141 C. 1903 [1] 267; D.R.P. 139957 C. 1903 [1] 857).  
 81) Alkohol (aus Gingergrasöl). Sd. 92—93° (C. 1904 [1] 1264).  
 82) 3-Keto-5-Isopropyl-2-Methyl-1,2,3,4-Tetrahydrobenzol (Menthen-3-on[5]). Sd. 206—208° (B. 28, 1587; Am. 16, 395; 18, 762; A. 305, 272). — \*III, 385.  
 83) 4-Keto-5-Isopropyl-2-Methyl-1,2,3,4-Tetrahydrobenzol (Menthenon) (C. 1903 [2] 1373).

- $C_{10}H_{16}O$
- 84) 1-4-Keto-2-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol (l-Carvotanacetone). *Sd.* 227—229° (*A.* 336, 37 *C.* 1904 [2] 1468).
  - 85) Camphenol. *Sd.* 202—204° (*H.* 33, 579). — \*III, 397.
  - 86) Calaminthol. *Sd.* 208—209°<sub>745</sub> (*C. r.* 136, 388 *C.* 1903 [1] 714).
  - 87) Keton (aus Bromumbellulon). *Sd.* 214—217° (*Soc.* 85, 643 *C.* 1904 [1] 1607; *C.* 1904 [2] 330).
  - 88) Aldehyd d. Cyklogeraniolencarbonsäure. *Sd.* 101—102° (*D.R.P.* 141973 *C.* 1903 [2] 78).
  - 89) Aldehyd d. isom. Cyklygeraniolencarbonsäure. *Sd.* 87—88°<sub>10</sub> (*D.R.P.* 142139 *C.* 1903 [2] 78).
  - 90) Aldehyd d. Säure  $C_{10}H_{16}O_2$  (aus Pinen). *Sm.* 32—33°; *Sd.* 205—207°<sub>755</sub> (*C.* 1903 [2] 372; *Soc.* 83, 1302 *C.* 1904 [1] 95).
  - 91) Verbindung (aus d-Pinen u. Chloraceton). *Sd.* 290° (*G.* 33 [1] 395 *C.* 1903 [2] 571).
- $C_{10}H_{16}O_2$
- \*20)  $\alpha$ -Campholensäure. *Sd.* 184° (*C. r.* 138, 696 *C.* 1904 [1] 1087).
  - \*27)  $\alpha$ -Pulegensäure (*A.* 327, 125, 147 *C.* 1903 [1] 1412).
  - \*45) Isocamphenilansäure. *Sm.* 117—118° (*H.* 37, 198 *C.* 1903 [1] 594).
  - \*60) 6-Oxy-4-Keto-5-Methyl-2-Isopropyl-1,2,3,4-Tetrahydrobenzol. *Sd.* 164,5—165° (*B.* 36, 3575 *C.* 1903 [2] 1362).
  - 74) 2,3-Diketo-4-Isopropyl-1-Methylhexahydrobenzol. *Sm.* 80—81°; *Sd.* 125—127°<sub>18</sub> (*C.* 1904 [2] 1044).
  - 75) isom. Oxyfenchon (*C.* 1904 [1] 282).
  - 76) 5-Oxy-7-Keto-1-Methylbicyklo-[1,3,3]-Nonan. *Sd.* 170—173°<sub>17-18</sub> (*B.* 37, 1672 *C.* 1904 [1] 1606).
  - 77)  $\alpha$ -Heptadien- $\delta$ -[Aethyl- $\beta$ -Carbonsäure] ( $\gamma\gamma$ -Diallylbuttersäure). *Sd.* 264—267°. *Na*, *Ag* (*C.* 1904 [1] 1330).
  - 78)  $\alpha$ -Nonin- $\alpha$ -Carbonsäure. *Sm.* 6—10°; *Sd.* 164—168°<sub>20</sub> (*C. r.* 136, 554 *C.* 1903 [1] 825).
  - 79) 1,1,3-Trimethyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure? *Sd.* 140—142°<sub>15</sub> (*D.R.P.* 148206 *C.* 1904 [1] 486).
  - 80) 1,1,3-Trimethyl-1,2,3,4-Tetrahydrobenzol-5-Carbonsäure? *Sm.* 140°; *Sd.* 154°<sub>18</sub> (*D.R.P.* 141699 *C.* 1903 [1] 1245).
  - 81) Säure (aus Pinen). *Sm.* 117°. *Pb*, *Ag* (*C.* 1903 [2] 372; *Soc.* 83, 1304 *C.* 1904 [1] 95).
  - 82) Lakton d. cis-5-Oxy-1,1,3-Trimethylhexahydrobenzol-2-Carbonsäure. *Sm.* 57°; *Sd.* 122—123° (*D.R.P.* 148207 *C.* 1904 [1] 487).
  - 83) Lakton (aus Pulegensäure). *Sm.* 30—31°; *Sd.* 126—128°<sub>12</sub> (*A.* 327, 128 *C.* 1903 [1] 1412).
  - 84) Methylester d.  $\zeta$ -Methyl- $\alpha$ -Heptin- $\alpha$ -Carbonsäure. *Sd.* 125—127°<sub>31</sub> (*C. r.* 136, 554 *C.* 1903 [1] 825).
  - 85) Aethylester d.  $\epsilon$ -Methyl- $\alpha$ -Hexin- $\alpha$ -Carbonsäure. *Sd.* 110—112°<sub>18</sub> (*C. r.* 136, 553 *C.* 1903 [1] 825).
  - 86) Aethylester d.  $\beta\delta$ -Dimethyl- $\alpha\gamma$ -Pentadien- $\alpha$ -Carbonsäure. *Sd.* 94°<sub>14</sub> (*B.* 36, 16 *C.* 1903 [1] 387).
  - 87) Aethylester d. 2,3,4,5-Tetrahydro-R-Hepten-6-Carbonsäure. *Sd.* 108°<sub>14</sub> (*B.* 37, 934 *C.* 1904 [1] 1072).
  - 88) Aethylester d. 5-Methyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. *Sd.* 155—157°<sub>100</sub> (*Soc.* 85, 664 *C.* 1904 [2] 330).
  - 89) Isobutylester d.  $\gamma$ -Methyl- $\alpha$ -Butin- $\alpha$ -Carbonsäure. *Sd.* 99—101°<sub>19</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).
  - 90) Verbindung (aus Camphen). *Sm.* 169—170° (*B.* 37, 1034 *C.* 1904 [1] 1262).
- $C_{10}H_{16}O_3$
- \*15) Flüssige Pinonsäure (*B.* 37, 239 *C.* 1904 [1] 726).
  - \*32) Oxy-lakton (aus Pulegensäure). *Sm.* 129—130° (*A.* 327, 127 *C.* 1903 [1] 1412).
  - 58) Barringtonenin. *Sm.* 169—170° (*C.* 1903 [2] 842).
  - 59)  $\delta$ -Oxy- $\alpha\zeta$ -Heptadien- $\delta$ -[Aethyl- $\beta$ -Carbonsäure]. *Ca*, *Ba* (*C.* 1904 [1] 1330).
  - 60) 5-Oxy-1,3-Dimethylhexahydrobenzol-1,5-Dicarbonsäure. *Sm.* 182—183° (wasserfrei) (*B.* 37, 4064 *C.* 1904 [2] 1650; *B.* 37, 4072 *C.* 1904 [2] 1652).
  - 61) Oxydihydro- $\beta$ -Camphylmethyläthersäure. *Sm.* 94°. *Ag* (*Soc.* 83, 869 *C.* 1903 [2] 574).

- $C_{10}H_{16}O_3$  62)  $\alpha$ -[3-Keto-4-Methylhexahydrophenyl]propionsäure (B. 36, 769 C. 1903 [1] 836).  
 63) Anhydrid d.  $\beta$ -Methylheptan- $\gamma$ -Dicarbonsäure. Fl. (C. 1904 [2] 1044).  
 64) Methylester d. 3-Keto-1-Methyl-2-Aethyl-R-Pentamethylen-2-Carbonsäure. Sd. 108—110 $^{\circ}_{16}$  (C. r. 138, 210 C. 1904 [1] 663).  
 65) Aethylester d. 5-Keto-1,1-Dimethyl-R-Pentamethylen-2-Carbonsäure. Sd. 170—172 $^{\circ}_{100}$  (C. 1903 [1] 923; Soc. 85, 138 C. 1904 [1] 728).  
 66) Aethylester d. 3-Keto-1,2-Dimethyl-R-Pentamethylen-2-Carbonsäure. Sd. 112—113 $^{\circ}_{16}$  (C. r. 138, 210 C. 1904 [1] 663).
- $C_{10}H_{16}O_4$  \*3) r-Camphersäure. Sm. 200—202 $^{\circ}$  (B. 36, 4335 C. 1904 [1] 456).  
 \*18) Homotanacetondicarbonsäure. Sm. 148 $^{\circ}$ . Ag $_2$  (B. 36, 4368 C. 1904 [1] 455).  
 \*38) Diäthylester d.  $\beta$ -Buten- $\beta\gamma$ -Dicarbonsäure. Sd. 234—236 $^{\circ}$  (B. 37, 1272 C. 1904 [1] 1334).  
 \*61) Aethylester d.  $\gamma\delta$ -Diketo- $\beta$ -Methylhexan- $\delta$ -Carbonsäure (Ae. d. Isobutyrylacetessigsäure). Sd. 93—94 $^{\circ}_{18}$  (Bl. [3] 27, 1092 C. 1903 [1] 226).  
 77)  $\epsilon$ -Methyl- $\alpha$ -Hepten- $\delta\eta$ -Dicarbonsäure. Sm. 104 $^{\circ}$  (C. r. 138, 211 C. 1904 [1] 663).  
 78)  $\zeta$ -Methyl- $\alpha$ -Hepten- $\delta\eta$ -Dicarbonsäure ( $\gamma$ -Methyl- $\alpha$ -Allyladipinsäure). Sm. 100 $^{\circ}$ ; Sd. 235 $^{\circ}_{20}$  (C. r. 138, 1614 C. 1903 [2] 440).  
 79)  $\beta\epsilon$ -Dimethyl- $\gamma$ -Hexen- $\beta\epsilon$ -Dicarbonsäure. Sm. 70 $^{\circ}$ . Ag $_2$  (Soc. 83, 1384 C. 1904 [1] 159, 434).  
 80) Säure (aus  $\beta\epsilon$ -Dimethyl- $\gamma$ -Hexen- $\beta\epsilon$ -Dicarbonsäure). Sm. 60—61 $^{\circ}$ . Ag $_2$  (Soc. 83, 1386 C. 1904 [1] 434).  
 81) Säure (aus d. Verb.  $C_{10}H_{16}O_2$ ). Sm. 203 $^{\circ}$  (B. 37, 1034 C. 1904 [1] 1262).  
 82) Methylester d.  $\gamma$ -Butyroxyl- $\beta$ -Buten- $\beta$ -Carbonsäure (M. d. O-Methylbutyrylacetessigsäure). Sd. 122—130 $^{\circ}_{20}$  (Bl. [3] 27, 1103 C. 1903 [1] 227).  
 83) Methylester d.  $\beta\delta$ -Diketo- $\gamma$ -Methylheptan- $\gamma$ -Carbonsäure (M. d. Methylbutyrylacetessigsäure). Sd. 122—130 $^{\circ}_{20}$  (Bl. [3] 27, 1103 C. 1903 [1] 227).  
 84) Diäthylester d.  $\beta$ -Buten- $\alpha\delta$ -Dicarbonsäure. Sd. 120—125 $^{\circ}_{17}$  (Soc. 85, 612 C. 1904 [1] 1254, 1553).  
 85) Diäthylester d. trans-1-Methyl-R-Trimethylen-2,3-Dicarbonsäure. Sd. 198—200 $^{\circ}_{14}$  (J. pr. [2] 68, 160 C. 1903 [2] 759).
- $C_{10}H_{16}O_5$  \*15) Diäthylester d. Oxyfumaräthyläthersäure. Sd. 138 $^{\circ}_{11}$  (Soc. 83, 417 C. 1903 [1] 834).  
 29) isom. Oxycamphersäure. Ag $_2$  (Am. 28, 481 C. 1903 [1] 329).  
 30) Dimethylester d.  $\gamma$ -Ketohehexan- $\alpha\beta$ -Dicarbonsäure (D. d. Butyrylbernsteinsäure). Sd. 153—154 $^{\circ}_{26}$  (Bl. [3] 27, 1093 C. 1903 [1] 226).  
 31) Diäthylester d.  $\alpha$ -Oxy- $\alpha$ -Buten- $\beta\gamma$ -Dicarbonsäure. Sd. 150 $^{\circ}_{12}$  (B. 37, 1611 C. 1904 [1] 1402).  
 32) Diäthylester d. Butan- $\beta\gamma$ -Dicarbonsäure- $\alpha$ -Carbonsäurealdehyd. Fl. (B. 37, 1612 C. 1904 [1] 1402).
- $C_{10}H_{16}O_6$  22) Dioxycamphersäure. Fl. (B. 36, 4333 C. 1904 [1] 456).  
 23) Verbindung (aus Aethyloxalylechlorid). Sd. 246—248 $^{\circ}_{760}$  (C. r. 136, 1200 C. 1903 [2] 22).
- $C_{10}H_{16}O_7$  9) Trimethylester d.  $\beta$ -Oxypropanmethyläther- $\alpha\beta\gamma$ -Tricarbonsäure (Tr. d. Methylcitronensäure). Sd. 159—160 $^{\circ}_{12}$  (A. 327, 228 C. 1903 [1] 1403).
- $C_{10}H_{16}N_2$  \*4) 2,5-Diamido-4-Isopropyl-1-Methylbenzol. 2HCl (A. 336, 22 C. 1904 [2] 1467).  
 \*12) 1,4-Di[Dimethylamido]benzol. Sm. 51 $^{\circ}$  (B. 36, 2979 C. 1903 [2] 980).  
 24)  $\alpha\beta$ -Diäthyl- $\alpha$ -Phenylhydrazin. Sd. 111—115 $^{\circ}_{12}$  (C. 1903 [1] 1128; B. 35, 4185 C. 1903 [1] 143).
- $C_{10}H_{16}Cl_2$  7) Dichlordekahydronaphtalin. Sd. 145—148 $^{\circ}_{18}$  (C. r. 139, 674 C. 1904 [2] 1654).  
 8) i-Dichlorid d. Kohlenw.  $C_{10}H_8$  (aus Fenchylechlorid). Sm. 49—51 $^{\circ}$  (J. pr. [2] 68, 109 C. 1903 [2] 722).
- $C_{10}H_{16}Br_2$  \*3) Pinendibromid. Sm. 167—168 $^{\circ}$  (C. r. 137, 131 C. 1903 [2] 571).  
 7) Phellandrendibromid (B. 36, 1754 C. 1903 [2] 117).  
 8) Dibromid d. Terpen  $C_{10}H_{16}$ . Fl. (Soc. 83, 1096 C. 1903 [2] 794).

- $C_{10}H_{16}Br_4$  13) Verbindung (aus Guttapercha) oder  $C_{17}H_{27}Br_7$ . Zers. bei  $120^\circ$  (*C.* 1903 [1] 83).
- $C_{10}H_{16}S$  \*1) Thiocampher. Sm.  $119^\circ$ ; Sd.  $228-230^\circ_{761}$  u. Zers. (*B.* 36, 868 *C.* 1903 [1] 972).
- $C_{10}H_{17}N$  23) Nitril d.  $\alpha$ -Dihydrocampholensäure. Sd.  $225-228^\circ$  (*C. r.* 136, 1143 *C.* 1903 [1] 1410).
- $C_{10}H_{17}Cl$  \*29) sec. Fenchylchlorid. Sm.  $75^\circ$ ; Sd.  $83-84^\circ_{10}$  (*J. pr.* [2] 68, 107 *C.* 1903 [2] 722).
- 30) Chlordekahydronaphtalin. Sd.  $112-115^\circ_{18}$  (*C. r.* 139, 674 *C.* 1904 [2] 1654).
- 31) Chlorid d. d-Fenchylalkohol. Sd.  $105-110^\circ_3$  (*C. r.* 126, 756). — \*III, 343.
- $C_{10}H_{17}J$  \*2) Bornyljodid (1-Pinenhydrojodid) (*B.* 35, 4417 *C.* 1903 [1] 330).
- 6) Isobornyljodid (*B.* 32, 2320). — \*III, 398.
- 7) Camphenhydrojodid. Sm.  $48-55^\circ$  (*C.* 1901 [1] 629; *J. pr.* [2] 68, 535; *Ch. Z.* 25, 132). — \*III, 398.
- 8) isom. Camphenhydrojodid. Fl. (*C.* 1901 [1] 629; *J. pr.* [2] 68, 535).
- 9) i-Pinenhydrojodid (i-Bornyljodid) (*B.* 32, 2317). — \*III, 393.
- $C_{10}H_{18}O$  \*9) Cineol (Cajeputol). Sd.  $174^\circ$  (*G.* 33 [1] 401 *C.* 1903 [2] 571; *Ar.* 242, 181 *C.* 1904 [1] 1350).
- \*22) Geraniol (*J. pr.* [2] 66, 498 *C.* 1903 [1] 516).
- \*28) l-Linalool (*J. pr.* [2] 66, 493 *C.* 1903 [1] 516).
- \*32) l-Menthon (*B.* 36, 273 *C.* 1903 [1] 440).
- \*42) i-Terpineol (5-Methyl-2- $\alpha$ -Oxyisopropyl-1,2,3,4-Tetrahydrobenzol). Sd.  $134-135^\circ$  (*Soc.* 85, 666 *C.* 1904 [2] 330).
- \*44) d-Terpineol (*J. pr.* [2] 66, 497 *C.* 1903 [1] 516).
- \*53)  $\delta$ -Oxy- $\delta$ -Propyl- $\alpha$ - $\zeta$ -Heptadien (*C.* 1903 [2] 1415).
- \*66)  $\epsilon$ -Keto- $\beta\gamma$ - $\zeta$ -Trimethyl- $\gamma$ -Hepten. Sd.  $189-191^\circ$  (*C.* 1903 [2] 656).
- \*70) Diisovaleraldehyd. Sd.  $86^\circ_{18}$  (*M.* 25, 153 *C.* 1904 [1] 1000).
- \*76) i-Linalool (*Soc.* 83, 509 *C.* 1903 [1] 1029).
- \*81)  $\beta$ -[4-Oxy-4-Methylhexahydrophenyl]propen. Sd.  $125-127^\circ_{60}$  (*Soc.* 85, 671 *C.* 1904 [2] 331).
- 88)  $\delta$ -Oxy- $\beta\delta\zeta$ -Trimethyl- $\beta\epsilon$ -Heptadien. Sm.  $57,5^\circ$ ; Sd.  $43-46^\circ_{0,25}$  (*B.* 37, 3579 *C.* 1904 [2] 1376).
- 89) l, l, 5-Trimethyl-4-[ $\beta$ -Oxyäthyl]-2,3-Dihydro-R-Penten (Campholenalkohol). Sd.  $215-216^\circ_{760}$  (*C. r.* 138, 280 *C.* 1904 [1] 725).
- 90) Allyläther d. l-3-Oxy-1-Methylhexahydrobenzol. Sd.  $79-81^\circ_{18}$  (*C. r.* 138, 1666 *C.* 1904 [2] 441).
- 91) Apopinol. Sd.  $200^\circ$  (*C.* 1904 [1] 1263).
- 92) Campholenyloxyd. Sd.  $180-182^\circ_{760}$  (*C. r.* 138, 281 *C.* 1904 [1] 725).
- 93) Cyklogeraniol. Sd.  $95-100^\circ_{12}$  (*D.R.P.* 138141 *C.* 1903 [1] 266).
- 94) d-Isoborneol (*J. pr.* [2] 55, 34). — \*III, 340.
- 95) l-Isoborneol (*J. pr.* [2] 55, 34). — \*III, 340.
- 96) isom. Isofenchylalkohol. Sm.  $61,5^\circ$  (*J. pr.* [2] 65, 229). — \*III, 344.
- 97) Nerol. Sd.  $225-227^\circ_{765}$  (*J. pr.* [2] 68, 501 *C.* 1903 [1] 517; *B.* 36, 265 *C.* 1903 [1] 585; *C.* 1903 [2] 877, 1081; *B.* 37, 1094 *C.* 1904 [1] 1265; *D.R.P.* 150495 *C.* 1904 [2] 69). — \*III, 350.
- 98) isom. Terpeneol (*Soc.* 85, 1329 *C.* 1904 [2] 1652).
- 99) Alkohol (aus Camphenylon). Sm.  $117,5-118^\circ$ ; Sd.  $204-206^\circ$  (*B.* 37, 1037 *C.* 1904 [1] 1263).
- 100)  $\zeta$ -Keto- $\delta$ -Methyl- $\delta$ -Nonen. Sd.  $196-200^\circ$  (*C.* 1903 [2] 656).
- 101) l-P-Menthon. Sd.  $94-95^\circ_{16}$  (*C.* 1904 [2] 1045).
- 102) Keton (aus Buccoblätteröl). Sd.  $208,5-209,5^\circ_{760}$  (*J. pr.* [2] 54, 438; [2] 63, 54). — \*III, 408.
- 103) Aldehyd d.  $\beta\zeta$ -Dimethyl- $\beta$ -Hepten- $\eta$ -Carbonsäure (Rhodinal) (*C. r.* 122, 737). — \*III, 350.
- $C_{10}H_{18}O_2$  \*3) Camphenglykol. Sm.  $199-200^\circ$  (*B.* 37, 1035 *C.* 1904 [1] 1262).
- \*22) i-Citronellalsäure (Rhodinsäure). Sd.  $146^\circ_{10}$  (*C. r.* 138, 1700 *C.* 1904 [2] 440).
- 58) 5,7-Dioxy-1-Methylbicyclo-[1,3,3]-Nonan. Sm.  $124-125^\circ$  (*B.* 37, 1673 *C.* 1904 [1] 1607).
- 59)  $\epsilon$ -Aethyläther d.  $\delta\epsilon$ -Dioxy- $\delta$ -Allyl- $\alpha$ -Penten. Sd.  $101-102^\circ_{25}$  (*C. r.* 138, 91 *C.* 1904 [1] 505).
- 60) 2-Keto-1-Methyl-4-[ $\alpha$ -Oxyisopropyl]hexahydrobenzol (8-Oxytetrahydrocarvon). Fl. (*B.* 28, 1590; 29, 15). — \*III, 353.

- $C_{10}H_{18}O_2$  61) r- $\alpha$ -Dihydrocampholensäure. Sd. 258° (*C. r.* 136, 1143 *C.* 1903 [1] 1410).  
 62) Säure (aus Naphta). Sd. 132—145° (*C.* 1903 [1] 1134).  
 63) Acetat d. 1-Oxy-1-Aethylhexahydrobenzol. Sd. 190°<sub>700</sub> (*C. r.* 138, 1323 *C.* 1904 [2] 219).
- $C_{10}H_{18}O_3$  \*55)  $\alpha$ -Keto- $\beta$ -Methyloktan- $\alpha$ -Carbonsäure. Sd. 124—125°<sub>9</sub> (*Bl.* [3] 31, 1153 *C.* 1904 [2] 1707).  
 \*58) Aethylester d.  $\delta$ -Oxy- $\beta$ -Hepten- $\epsilon$ -Carbonsäure. Sd. 128—130°<sub>16</sub> (*C.* 1903 [2] 556).  
 \*59) Aethylester d.  $\delta$ -Oxy- $\epsilon$ -Methyl- $\beta$ -Hexen- $\epsilon$ -Carbonsäure. Sd. 118 bis 120°<sub>17</sub> (*C.* 1903 [2] 556).  
 \*60) Aethylester d.  $\beta$ -Ketoheptan- $\alpha$ -Carbonsäure. Sd. 116—117°<sub>20</sub> (*Bl.* [3] 31, 597 *C.* 1904 [2] 26).  
 65) 2-Keto-4- $[\alpha\beta$ -Dioxyisopropyl]-1-Methylhexahydrobenzol (Keto-glykol). Sm. 115—120°; Sd. 200°<sub>100</sub> (*B.* 28, 2705). — \*III, 375.  
 66)  $\beta$ -Oxy- $\alpha$ -Oktenmethyläther- $\alpha$ -Carbonsäure. Sm. 55,5° (*C. r.* 138, 287 *C.* 1904 [1] 719).  
 67)  $\beta$ -Oxy- $\alpha$ -Heptenäthyläther- $\alpha$ -Carbonsäure. Sm. 74° (*C. r.* 138, 287 *C.* 1904 [1] 719).  
 68)  $\alpha$ -[3-Oxy-4-Methylhexahydrophenyl]propionsäure. Ag (*B.* 36, 769 *C.* 1903 [1] 836).  
 69) cis-5-Oxy-1,1,3-Trimethylhexahydrobenzol-2-Carbonsäure. Sm. 141—143° (*D.R.P.* 148207 *C.* 1904 [1] 487).  
 70) trans-5-Oxy-1,1,3-Trimethylhexahydrobenzol-2-Carbonsäure. Sm. 151—153° (*D.R.P.* 148207 *C.* 1904 [1] 487).  
 71) cis-5-Oxy-1,1,3-Trimethylhexahydrobenzol-5-Carbonsäure. Sm. 113° (*D.R.P.* 141699 *C.* 1903 [1] 1245).  
 72) trans-5-Oxy-1,1,3-Trimethylhexahydrobenzol-5-Carbonsäure. Sm. 130° (*D.R.P.* 141699 *C.* 1903 [1] 1245).  
 73) Methylester d.  $\beta$ -Oxy- $\alpha$ -Heptenmethyläther- $\alpha$ -Carbonsäure. Sd. 232 bis 233° (*C. r.* 138, 208 *C.* 1904 [1] 659; *Bl.* [3] 31, 511 *C.* 1904 [1] 1602).  
 74) Verbindung (aus  $\delta$ -Oxy- $\beta\delta\zeta$ -Trimethyl- $\beta\epsilon$ -Heptadien). Fl. (*B.* 37, 3580 *C.* 1904 [2] 1376).
- $C_{10}H_{18}O_4$  \*5) Sebacinsäure (*C.* 1903 [2] 1330).  
 \*33) Diäthylester d. Butan- $\alpha\delta$ -Dicarbonsäure. Sd. 130°<sub>14</sub> (*Bl.* [3] 29, 1044 *C.* 1903 [2] 1424).  
 70) Oktan- $\alpha\alpha$ -Dicarbonsäure. Sm. 95° u. Zers. Ba + 3H<sub>2</sub>O (*C.* 1904 [1] 880).  
 71)  $\beta$ -Methylheptan- $\gamma\zeta$ -Dicarbonsäure. Sm. 105—106°; Sd. 218—220° u. Zers. Cu (*C.* 1904 [2] 1044).  
 72)  $\gamma$ -Methylheptan- $\alpha\delta$ -Dicarbonsäure. Sm. 110° (*C. r.* 138, 211 *C.* 1904 [1] 663).  
 73) Aethylester d.  $\alpha$ -Acetoxyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sd. 113°<sub>20</sub> (*Bl.* [3] 31, 322 *C.* 1904 [1] 1134).  
 74) Isobutylester d.  $\alpha$ -1-Propionoxylpropionsäure. Sd. 97,5—100°<sub>11</sub> (*C.* 1903 [2] 1419).  
 75) Diacetat d.  $\alpha\zeta$ -Dioxyhexan. Sm. 5°; Sd. 262°<sub>765</sub> (*C. r.* 136, 245 *C.* 1903 [1] 583).
- $C_{10}H_{18}O_5$  22) Diäthylester d.  $\alpha$ -Oxybutan- $\alpha\beta$ -Dicarbonsäure. Sd. 133—135°<sub>12</sub> (*B.* 37, 2382 *C.* 1904 [2] 306).
- $C_{10}H_{18}O_6$  \*4) Dipropylester d. d-Weinsäure. Sd. 171—172°<sub>17</sub> (*Soc.* 85, 767 *C.* 1904 [2] 512).  
 9)  $\gamma\delta$ -Dioxy- $\beta\epsilon$ -Dimethylhexan- $\beta\epsilon$ -Dicarbonsäure. Sm. 129—130° (*Soc.* 83, 1386 *C.* 1904 [1] 159, 434).  
 10) Laktone d. Glykontetramethyläthersäure. Fl. (*Soc.* 83, 1033 *C.* 1903 [2] 346, 659).
- $C_{10}H_{18}O_8$  5) Phaseolunatinsäure (*C.* 1903 [2] 1334).
- $C_{10}H_{18}Cl_2$  \*23) Terpendihydrochlorid (aus Kautschuk) (*B.* 37, 2433 *C.* 1904 [2] 334).
- $C_{10}H_{18}Br_2$  \*3) trans-1,4-Dibrom-4-Isopropyl-1-Methylhexahydrobenzol. Sm. 58 bis 59° (*B.* 37, 1483 *C.* 1904 [1] 1349).  
 \*11) Dibromid (aus 1-Fenchylalkohol). Sm. 49° u. 52,5° (*J. pr.* [2] 68, 111 *C.* 1903 [2] 722).  
 12) Dihydrobromid d. Kohlenw.  $C_{10}H_{16}$  (aus Fenchylchlorid) (*J. pr.* [2] 68, 110 *C.* 1903 [2] 722).

- $C_{10}H_{18}S$  1) Merkaptoborneol. Sm. 61—62°; Sd. 224—225°<sub>760</sub>. Pb, Hg (B. 36, 869 C. 1903 [1] 972).
- $C_{10}H_{19}N$  \*6) Bornylamin.  $H_3PO_4$ , CHNS (Soc. 85, 1194 C. 1904 [2] 1125).
- 27) sec. i-Amidodihydrocamphen. Sm. 65—130°; Sd. 194—204°. (2HCl, PtCl<sub>4</sub>) (C. 1903 [1] 512).
- $C_{10}H_{19}Cl$  8) Chlormenthan. Sd. 94—95°<sub>15</sub> (C. 1904 [1] 1348).
- 9) sec. 1-Menthylchlorid. Sd. 113,5—114,5° (C. 1897 [1] 1058; 1901 [2] 347). — \*III, 333.
- $C_{10}H_{19}Br$  \*2) act. Menthylbromid. Sd. 104—106°<sub>15</sub> (J. pr. [2] 67, 193 C. 1903 [1] 713; B. 35, 4416 C. 1903 [1] 330).
- 5) p-4-Brommenthan. Sd. 110—111°<sub>15</sub> (C. 1904 [1] 1347).
- 6) isom. act. Menthylbromid. Sd. 103—105°<sub>15</sub> (J. pr. [2] 67, 194 C. 1903 [1] 713).
- 7) i-Menthylbromid. Sd. 98—99°<sub>11</sub> (J. pr. [2] 67, 195 C. 1903 [1] 713).
- $C_{10}H_{19}J$  3) i-Menthyljodid (J. pr. [2] 63, 63). — \*III, 336.
- $C_{10}H_{20}O$  \*10) 2-Oxy-4-Isopropyl-1-Methylhexahydrobenzol (Hexahydrocarvakrol). Sd. 218—219° (C. r. 137, 1269 C. 1904 [1] 454).
- \*23)  $\delta$ -Oxy- $\delta$ -Propyl- $\alpha$ -Hepten (C. 1903 [2] 1415).
- 47) 3-Oxy-4-Isopropyl-1-Methylhexahydrobenzol (Hexahydrothymol). Sd. 214° (C. r. 137, 1269 C. 1904 [1] 454).
- 48) d-Menthol. Sm. 38,5—39° (J. pr. [2] 63, 56). — \*III, 336.
- 49) i-Menthol. Sm. 49—51° (J. pr. [2] 55, 30). — \*III, 336.
- 50) isom. i-Menthol. Sd. 215—216°<sub>788</sub> (J. pr. [2] 63, 61). — \*III, 336.
- 51) r-Rhodinol. Sd. 110°<sub>10</sub> (C. r. 138, 1701 C. 1904 [2] 440).
- 52) Tetrahydroumbellulol. Sd. 207—208°<sub>760</sub> (Soc. 85, 644 C. 1904 [1] 1608 C. 1904 [2] 330).
- 53) 1-Oxy-1-Isobutylhexahydrobenzol. Sd. 102°<sub>20</sub> (C. r. 138, 1322 C. 1904 [2] 219).
- 54) 2-Oxymethyl-1,1,2,5-Tetramethyl-R-Pentamethylen (Campholalkohol). Sm. 60°; Sd. 213° (Bl. [3] 31, 750 C. 1904 [2] 303).
- 55) Alkohol (aus Hydroxynitrosamidomethen). Sd. 119—125°<sub>19</sub> (B. 36, 490 C. 1903 [1] 637).
- 56) Propyläther d.  $\beta$ -Oxy- $\alpha$ -Hepten. Sd. 181—182° (C. r. 138, 287 C. 1904 [1] 719; Bl. [3] 31, 524 C. 1904 [1] 1552).
- 57)  $\beta\gamma\delta\epsilon$ -Tetramethylhexan- $\gamma\delta$ -Oxyd. Sd. 185—193° (C. 1903 [2] 23).
- 58) Aldehyd d. Nonan- $\beta$ -Carbonsäure. Sd. 98—100°<sub>20</sub> (C. r. 138, 92 C. 1904 [1] 505).
- 59) Aldehyd d.  $\beta$ -Methyloktan- $\epsilon$ -Carbonsäure. Sd. 195—198° (C. r. 138, 92 C. 1904 [1] 505).
- 60) Aldehyd d.  $\beta\zeta$ -Dimethylheptan- $\delta$ -Carbonsäure. Sd. 185—186° (C. r. 138, 91 C. 1904 [1] 505; Bl. [3] 31, 306 C. 1904 [1] 1133).
- 61) Verbindung (aus d. Glykol  $C_{10}H_{22}O_2$ ). Sd. 108—112° (M. 24, 581 C. 1903 [2] 870).
- 62) Verbindung (aus d. Glykol  $C_{10}H_{22}O_2$ ). Sd. 171° (M. 24, 583 C. 1903 [2] 870).
- $C_{10}H_{20}O_2$  \*12) Aldehyd d.  $\delta$ -Oxy- $\beta\zeta$ -Dimethylheptan- $\gamma$ -Carbonsäure. Sm. 83—84°; Sd. 200° (B. 5, 481; 6, 983; 8, 369, 414; M. 25, 1038 C. 1904 [2] 1599). — I, 950.
- \*30) norm. Oktylester d. Essigsäure. Sd. 98°<sub>15</sub> (C. r. 136, 1677 C. 1903 [2] 419).
- 55) 5-Oxy-2-Oxymethyl-1,1,3-Trimethylhexahydrobenzol. Sm. 92 bis 93°; Sd. 152°<sub>8</sub> (D.R.P. 148207 C. 1904 [1] 487).
- 56) 2-Oxy-1,1,2-Trimethyl-3-[ $\beta$ -Oxyäthyl]-R-Pentamethylen ( $\beta$ -Campholandiol). Sm. 145° (C. r. 138, 281 C. 1904 [1] 725).
- 57) Glykol (aus Dihydrophellandren). Fl. (B. 36, 1035 C. 1903 [1] 1135).
- $C_{10}H_{20}O_3$  \*5)  $\delta$ -Oxy- $\beta\zeta$ -Dimethylheptan- $\gamma$ -Carbonsäure. Sm. 81—82°; Sd. 240—244° u. Zers. Ag (M. 25, 1046 C. 1904 [2] 1599).
- 21) Methylester d.  $\beta$ -Ketooktan- $\alpha$ -Carbonsäure. Sd. 132,5—134°<sub>19</sub>. Cu (C. r. 136, 755 C. 1903 [1] 1019).
- 22) Heptylester d. 1- $\alpha$ -Oxypropionsäure. Sd. 115—116°<sub>10</sub> (C. 1903 [2] 1419).
- $C_{10}H_{20}O_4$  14) Oxypivalinat d.  $\alpha\gamma$ -Dioxy- $\beta\beta$ -Dimethylpropan. Sm. 51°; Sd. 260° (M. 25, 867 C. 1904 [2] 1106).
- $C_{10}H_{20}O_6$  \*1) Trimethyläther d.  $\alpha$ -Methylglykosid. Sd. 167—170°<sub>17</sub> (Soc. 83, 1028 C. 1903 [2] 346, 659; Soc. 83, 1037 C. 1903 [2] 346, 659).

- $C_{10}H_{20}O_6$  2)  $\alpha$ -Tetramethyläther d. Glykose. Sm. 88–89°; Sd. 182–185°<sub>20</sub> (Soc. 83, 1031 C. 1903 [2] 346, 659; Soc. 85, 1066 C. 1904 [2] 891).  
 3)  $\beta$ -Tetramethyläther d. Glykose. Sm. 88–89° (Soc. 85, 1060 C. 1904 [2] 892).  
 4) Tetramethyläther d. Galaktose. Sd. 172°<sub>13</sub> (Soc. 85, 1075 C. 1904 [2] 892).  
 $C_{10}H_{20}O_7$  C 47,6 — H 7,9 — O 44,5 — M. G. 252.  
 1) Glykontetramethyläthersäure. Ba (Soc. 83, 1034 C. 1903 [2] 346, 659).  
 $C_{10}H_{20}N_2$  16) Nitril d.  $\alpha$ -Aethylamidoheptan- $\alpha$ -Carbonsäure. Sd. 122°<sub>12</sub> (B. 37, 4094 C. 1904 [2] 1725).  
 17) Nitril d.  $\delta$ -Diäthylamido- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sd. 88,5 bis 89°<sub>11</sub> (B. 37, 4089 C. 1904 [2] 1724).  
 $C_{10}H_{20}N_4$  \*1) Dipiperidyltetrazon (G. 33 [2] 244 C. 1904 [1] 25).  
 2) 3,6-Diisobutyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 197° (J. pr. [2] 69, 483 C. 1904 [2] 537).  
 $C_{10}H_{21}N$  \*14) l-Menthylamin. HCl, d-Camphersulfonat, d-Bromcamphersulfonat (Soc. 85, 69 C. 1904 [1] 375, 808).  
 28) Diäthylamidohexahydrobenzol. Sd. 193° (C. r. 138, 1258 C. 1904 [2] 105).  
 29) Iso-l-Menthylamin. d-Camphersulfonat, d-Bromcamphersulfonat (Soc. 85, 74 C. 1904 [1] 375, 808).  
 30) neo-l-Menthylamin. d-Camphersulfonat, d-Bromcamphersulfonat (Soc. 85, 77 C. 1904 [1] 375, 808).  
 31) l-P-Menthylamin. Sd. 206–207°. HCl, Pikrat (C. 1904 [2] 1046).  
 32)  $\theta$ -Amido- $\beta\zeta$ -Dimethyl- $\beta$ -Okten (Rhodinamin). Sd. 105°<sub>15</sub> (Bl. [3] 29, 1048 C. 1903 [2] 1439).  
 33) 4-[ $\alpha$ -Amidoisopropyl]-l-Methylhexahydrobenzol. Sd. 199–200°<sub>760</sub> (C. 1904 [1] 1517).  
 $C_{10}H_{22}O$  \*1)  $\alpha$ -Oxydekan (C. r. 137, 61 C. 1903 [2] 551).  
 \*5)  $\gamma$ -Oxymethyl- $\beta\zeta$ -Dimethylheptan (Am. 30, 227 C. 1903 [2] 933).  
 22)  $\alpha$ -Oxy- $\gamma$ -Methylnonan. Sd. 114–116°<sub>14</sub> (C. r. 137, 328 C. 1903 [2] 710).  
 23)  $\epsilon$ -Oxy- $\beta$ -Methyl- $\epsilon$ -Aethylheptan. Sd. 83–86°<sub>15</sub> (C. r. 138, 153 C. 1904 [1] 577).  
 $C_{10}H_{22}O_2$  10)  $\alpha\alpha$ -Dioxydekan. Sm. 71,5° (70°); Sd. 179°<sub>11</sub> (192°<sub>20</sub>) (C. r. 137, 329 C. 1903 [2] 711; M. 24, 629 C. 1903 [2] 1237; M. 25, 344 C. 1904 [1] 1399).  
 11)  $\gamma\delta$ -Dioxy- $\beta\gamma\delta\epsilon$ -Tetramethylhexan. Sm. 22° (C. 1903 [2] 23).  
 12) isom.  $\gamma\delta$ -Dioxy- $\beta\gamma\delta\epsilon$ -Tetramethylhexan. Fl. (C. 1903 [2] 23).  
 13) Glykol (aus Isovaleriansäurealdehyd). Sm. 48°; Sd. 146–150°<sub>16</sub> (M. 24, 579 C. 1903 [2] 870).  
 14)  $\alpha$ -Aethyläther d.  $\alpha\beta$ -Dioxy- $\beta$ -Propylpentan. Sd. 201° (C. r. 138, 91 C. 1904 [1] 505; Bl. [3] 31, 303 C. 1904 [1] 1133).  
 15) Diäthyläther d.  $\epsilon\epsilon$ -Dioxy- $\beta$ -Methylpentan. Sd. 180–182° (B. 37, 188 C. 1904 [1] 638).  
 $C_{10}H_{22}N_2$  7) l,5-Diamido-3-Isopropyl-1-Methylhexahydrobenzol. Sd. 115–117°<sub>18</sub>. Oxalat (A. 328, 116 C. 1903 [2] 245).  
 $C_{10}H_{23}N$  \*4) Diisocamylamin. Salze siehe (C. r. 135, 902 C. 1903 [1] 131).  
 9) Base (aus tert. Amylchlorid u. Diäthylformamid). Sd. 165–166° (C. r. 136, 1109 C. 1904 [1] 1644).

- $C_{10}H_4O_2Cl_4$  5) 1,1,4,4-Tetrachlor-2,3-Diketo-1,2,3,4-Tetrahydronaphthalin +  $\frac{1}{2}H_2O$ . Sm. 115°.  $HNO_3$  (A. 334, 351 C. 1904 [2] 1054).  
 $C_{10}H_4O_4Br_4$  1) 1,4,6,7-Tetrabrom-2,3-Dioxynaphthalin. Sm. 242° (A. 334, 363 C. 1904 [2] 1055).  
 $C_{10}H_5O_4N$  \*1) 3-Nitro-1,2-Naphtochinon. Sm. 158° (C. 1903 [2] 1109).  
 $C_{10}H_5O_7N_3$  \*1) 2,4,5-Trinitro-1-Oxynaphthalin. Sm. 190°. K +  $H_2O$  (A. 335, 147 C. 1904 [2] 1135).  
 \*2) 2,4,8-Trinitro-1-Oxynaphthalin. Sm. 175° (A. 335, 156 C. 1904 [2] 1136).  
 $C_{10}H_5O_7Br$  1) 4-Brombenzol-1,3-Dicarbonsäure-2-Ketocarbonsäure. Sm. 192° (A. 327, 90 C. 1903 [1] 1228).

- $C_{10}H_6ON_2$  7) Anhydrid d. 1-Oxy-2-Diazonaphtalin. Sm. 76—77° (*C.* 1903 [1] 401).  
 $C_{10}H_6OBr_2$  \*1) 2,4-Dibrom-1-Oxynaphtalin. Sm. 107—108° (*A.* 333, 367 *C.* 1904 [2] 1117).  
 $C_{10}H_6O_2N_4$  3) 2,3-Dioxy-1,4,5,10-Naphttetrazin (Dioxypyrazinophenazin). Sm. oberh. 300°.  $NH_4$  (*B.* 36, 4041 *C.* 1904 [1] 183).  
 $C_{10}H_6O_2Cl_2$  7) 1,4-Dichlor-2,3-Dioxynaphtalin. Sm. 181° (*A.* 334, 353 *C.* 1904 [2] 1054).  
 $C_{10}H_6O_2Br_2$  6) 1,4-Dibrom-2,3-Dioxynaphtalin. Sm. 178° (*A.* 334, 361 *C.* 1904 [2] 1055).  
 7) 6,7-Dibrom-2,3-Dioxynaphtalin. Sm. 217° (*A.* 334, 364 *C.* 1904 [2] 1055).  
 8) 1-Dibromacetylbenzofuran. Sm. 90° (*B.* 36, 2865 *C.* 1903 [2] 832).  
 $C_{10}H_6O_4N_2$  \*2) 1,5-Dinitronaphtalin. Sm. 214° (*C.* 1904 [1] 461).  
 \*3) 1,6-Dinitronaphtalin. Sm. 161° (*A.* 335, 142 *C.* 1904 [2] 1135).  
 \*4) 1,8-Dinitronaphtalin. Sm. 170° (*C.* 1904 [1] 461).  
 \*14) 5-Nitro-4-Nitroso-1-Oxynaphtalin. Zers. bei 250—260° (*A.* 335, 145 *C.* 1904 [2] 1135).  
 \*15) 8-Nitro-4-Nitroso-1-Oxynaphtalin. Zers. bei 235—240°.  $Ba + 3H_2O$  (*A.* 335, 153 *C.* 1904 [2] 1136).  
 $C_{10}H_6O_6N_2$  \*6) 4,8-Dinitro-1-Oxynaphtalin. Sm. 235° u. Zers. (*A.* 335, 154 *C.* 1904 [2] 1136).  
 $C_{10}H_6O_6S$  \*1) 1,2-Naphtochinon-4-Sulfonsäure (*H.* 41, 379 *C.* 1904 [2] 112).  
 $C_{10}H_6O_6S$  5) 2-Oxy-1,4-Naphtochinon-6-Sulfonsäure (*D.R.P.* 100703). — \*III, 281.  
 $C_{10}H_6O_7N_4$  \*2) 6,8,9-Trinitro-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 214 bis 215° (*J. pr.* [2] 68, 103 *C.* 1903 [2] 445).  
 $C_{10}H_7OCl$  \*2) 4-Chlor-1-Oxynaphtalin. Sm. 116—117°. Pikrat (*Bl.* [3] 31, 35 *C.* 1904 [1] 519).  
 $C_{10}H_7OBr$  \*1) 4-Brom-1-Oxynaphtalin. Sm. 121°. Pikrat (*Bl.* [3] 31, 35 *C.* 1904 [1] 519).  
 $C_{10}H_7O_2N$  \*2) 2-Nitronaphtalin. Sm. 79°; Sd. 160—170°<sub>15</sub> (*B.* 36, 4157 *C.* 1904 [1] 284).  
 \*3) 2-Nitroso-1-Oxynaphtalin (2-Oximido-1-Keto-1,2-Dihydronaphtalin). Sm. 162—164° u. Zers. (*B.* 36, 4167 *C.* 1904 [1] 287).  
 \*13) Chinolin-4-Carbonsäure (*M.* 24, 201 *C.* 1903 [2] 48).  
 25) 1,3-Diketo-2-Amidomethylen-2,3-Dihydroinden. Sm. 210° u. Zers. (*G.* 32 [2] 331 *C.* 1903 [1] 586; *G.* 33 [1] 419 *C.* 1903 [2] 950, 1181).  
 $C_{10}H_7O_2N_5$  *C.* 52,4 — *H.* 3,1 — *O.* 13,9 — *N.* 30,6 — *M.* *G.* 229.  
 1) Ureidamidoazin.  $Na + \frac{1}{2}H_2O$  (*A.* 333, 45 *C.* 1904 [2] 770).  
 $C_{10}H_7O_2Cl$  3) 6-Chlormethyl-1,2-Benzpyron. Sm. 140—141° (*B.* 37, 195 *C.* 1904 [1] 660).  
 $C_{10}H_7O_3N$  \*1) 2-Nitro-1-Oxynaphtalin. Sm. 128° (*C.* 1903 [2] 1109).  
 \*3) 1-Nitro-2-Oxynaphtalin. Sm. 103° (*C.* 1903 [2] 1109).  
 \*29) Kynurensäure (*B.* 37, 1807 *C.* 1904 [1] 1611).  
 38) 1,3-Diketo-2-Hydroxylamidomethylen-2,3-Dihydroinden. Sm. 250°. *K.*, *Ag.* (*G.* 33 [2] 154 *C.* 1903 [2] 1272).  
 39) 6-Formylamido-1,2-Benzpyron. Sm. 175—176° (*Soc.* 85, 1233 *C.* 1904 [2] 1124).  
 40) 6-Oximidomethyl-1,2-Benzpyron. Sm. 223° (*B.* 37, 196 *C.* 1904 [1] 661).  
 41) 1,3,4-Triketo-2-Methyl-1,2,3,4-Tetrahydroisochinolin. Sm. 186 bis 187° (*B.* 37, 1944 *C.* 1904 [2] 123).  
 42)  $\alpha$ -Cyan- $\beta$ -[3-Oxyphenyl]akrylsäure (*Bl.* [3] 25, 594). — \*II, 1131.  
 43)  $\alpha$ -Cyan- $\beta$ -[4-Oxyphenyl]akrylsäure (*Bl.* [3] 25, 594). — \*II, 1131.  
 44) Nitril d. 3,4,5-Trioxy-1-Aethenylbenzol-4,5-Methylenäther-2-Carbonsäure (Norecotaronnitril). Sm. 202°. *Na.* (*B.* 36, 1532 *C.* 1903 [2] 52).  
 $C_{10}H_7O_3N_3$  5) Amid d.  $\alpha$ -Cyan- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 173—174° (*C.* 1904 [1] 878).  
 $C_{10}H_7O_3Cl$  4) Monochlorid d. Fumarsäuremonophenylester. Sm. 39°; Sd. 187 bis 188°<sub>40</sub> (*B.* 35, 4088 *C.* 1903 [1] 75).  
 $C_{10}H_7O_4N$  12) Anhydrid d. 3-Acetylamidobenzol-1,2-Dicarbonsäure. Sm. 181° (*B.* 36, 2537 *Anm.* *C.* 1903 [2] 720).

- $C_{10}H_7O_4N_3$  \*10) 4,5-Dinitro-1-Amidonaphtalin. Sm. 236° (D.R.P. 145191 C. 1903 [2] 1097).
- 15) 1-Oxy-4-Benzoyl-1,2,3-Triazol-5-Carbonsäure. Sm. 126—127° u. Zers. (A. 325, 167 C. 1903 [1] 645).
- $C_{10}H_7O_4Br$  6) Aldehyd d. 6-Brom-3,4,5-Trioxy-1-Aethenylbenzol-4,5-Methylenäther-2-Carbonsäure (Bromnecotarnon). Sm. 138°. Na (B. 36, 1536 C. 1903 [2] 53).
- $C_{10}H_7O_5N$  8) Difuranoylhydroxamsäure. Sm. 180° (B. 37, 2952 C. 1904 [2] 993).
- $C_{10}H_7O_5N_3$  2) Ureidoxyoxazon. Ba + 2H<sub>2</sub>O (A. 333, 50 C. 1904 [2] 771).
- 3) 4-[4-Nitrobenzoyl]methyl-1,2,3,6-Dioxdiazin. Sm. 197—198° (A. 330, 240 C. 1904 [1] 945).
- 4) 8,9-Dinitro-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 208° (J. pr. [2] 68, 102 C. 1903 [2] 445).
- $C_{10}H_7ClS$  1) 4-Chlor-1-Merkaptonaphtalin. Sm. 43—44° (C. r. 138, 982 C. 1904 [1] 1413).
- $C_{10}H_7BrS$  1) 4-Brom-1-Merkaptonaphtalin. Sm. 55—56° (C. r. 138, 982 C. 1904 [1] 1413).
- $C_{10}H_7BrHg$  1) 1-Naphtylmagnesiumbromid (B. 37, 626 C. 1904 [1] 810).
- $C_{10}H_8OBr_2$  1) Methyläther d.  $\alpha$ -[p-Dibrom-2-Oxyphenyl]propin. Sd. 165—166°<sub>10</sub> (B. 36, 1192 C. 1903 [1] 1179).
- 2) Verbindung (aus Dibromanetholdibromid). Sd. 200—205°<sub>18</sub> (B. 37, 1558 C. 1904 [1] 1438).
- $C_{10}H_8OBr_4$  1) Methyläther d.  $\alpha\beta$ -Dibrom- $\alpha$ -[p-Dibrom-2-Oxyphenyl]propen. Fl. (B. 36, 1192 C. 1903 [1] 1179).
- $C_{10}H_8O_3N_2$  \*22) 2,4-Diketo-6-Phenyl-1,2,3,4-Tetrahydro-1,3-Diazin. Sm. 269 bis 270° (Am. 29, 490 C. 1903 [1] 1310).
- \*27) 8-Nitro-6-Methylchinolin. Sm. 122° (C. 1904 [2] 543).
- \*53) 5-Phenylpyrazol-3-Carbonsäure. Hydrazinsalz (B. 37, 2202 C. 1904 [2] 323).
- 54) 6-Nitro-2-Methylchinolin. Sm. 173—174°. (2HCl, PtCl<sub>4</sub>) (M. 24, 99 C. 1903 [1] 922).
- 55) 4-Benzoyl-5-Methyl-1,2,3-Oxdiazol. Sm. 65—66° (A. 325, 136 C. 1903 [1] 643).
- 56) 1-Phenylpyrazol-1<sup>2</sup>-Carbonsäure. Sm. 138,5—139°. Ba (A. 19, 123). — IV, 498.
- 57) 1-Phenylpyrazol-1<sup>4</sup>-Carbonsäure. Sm. 264—265°. Na, Ba (A. 19, 120). — II, 498.
- 58) Nitril d.  $\alpha$ -Oximido-4-Methylbenzoylessigsäure. Sm. 130,5—131° (B. 37, 3469 C. 1904 [2] 1305).
- $C_{10}H_8O_2N_4$  3) 5-Oximido-6-Imido-4-Keto-2-Phenyl-3,4,5,6-Tetrahydro-1,3-Diazin (B. 37, 2269 C. 1904 [2] 198).
- 4) Nitril d.  $\alpha$ -Oximido- $\beta$ -Nitrosimido- $\beta$ -[4-Methylphenyl]propionsäure. NH<sub>4</sub> (B. 37, 3469 C. 1904 [2] 1305).
- $C_{10}H_8O_2Br_4$  5) Methyläther d. 2,5,6-Tribrom-3-Oxy-4-Keto-1-[ $\beta$ -Brompropylen]-1,4-Dihydrobenzol (A. 329, 32 C. 1903 [2] 1436).
- $C_{10}H_8O_3S$  \*3) Naphtalin-2-Sulbinsäure. Sm. 103°. Ag (A. 33 [2] 306 C. 1904 [1] 288).
- $C_{10}H_8O_3N_2$  \*16) Methyläther d. 5-Nitro-8-Oxychinolin. Sm. 151° (C. 1903 [1] 36).
- \*22) 5-Keto-1-Phenyl-4,5-Dihdropyrazol-3-Carbonsäure. Sm. 263° u. Zers. (A. 331, 103 C. 1904 [1] 931).
- \*37) 8-Nitro-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 133—134° (J. pr. [2] 68, 100 C. 1903 [2] 444).
- 40) 8-Methylnitrosamido-1,2-Benzpyron. Sm. 168—169° (Soc. 85, 1238 C. 1904 [2] 1124).
- 41) 4-Nitro-5-Methyl-3-Phenylisoxazol. Sm. 48° (A. 329, 260 C. 1904 [1] 32).
- 42) 4-Benzoylmethyl-1,2,3,6-Dioxdiazin. Sm. 158—159° (A. 330, 241 C. 1904 [1] 945).
- 43) 4-Oximido-1,3-Diketo-2-Methyl-1,2,3,4-Tetrahydroisochinolin. Sm. 207—208° (B. 37, 1945 C. 1904 [2] 123).
- 44) Amid d.  $\alpha$ -Cyan- $\beta$ -[3,4-Dioxyphenyl]akrylsäure. Sm. 232° u. Zers. (C. 1904 [2] 903).
- $C_{10}H_8O_3Br_2$  3)  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure. Sm. 138° u. Zers. (B. 36, 2528 C. 1903 [2] 496).

- $C_{10}H_8O_4N_2$  \*9) 4-Nitrophenylimid d. Bernsteinsäure. Sm. 210° (A. 327, 49 Anm. C. 1903 [1] 1336).  
 18)  $\delta$ -Nitro- $\delta$ -Nitroso- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 123—124° (C. 1903 [2] 1432; A. 330, 256 C. 1904 [1] 946).  
 19)  $\delta$ -Oximido- $\gamma$ -Keto- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten. Sm. 164° u. Zers. (C. 1904 [1] 28; A. 330, 252 C. 1904 [1] 946).  
 20) Methylester d. 5, 8-Diketo-5, 6, 7, 8-Tetrahydro-1, 6[oder 1, 7]-Benzdiazin-7[oder 6]-Carbonsäure. Sm. 203—205° u. Zers. (B. 37, 2133 C. 1904 [2] 232).  
 21) 3-Nitrophenylimid d. Bernsteinsäure. Sm. 175—176° (A. 327, 47 C. 1903 [1] 1336).  
 $C_{10}H_8O_4N_4$  5) 5-Methyl-3-[3, 5-Dinitrophenyl]pyrazol. Sm. 220° (J. pr. [2] 69, 466 C. 1904 [2] 596).  
 $C_{10}H_8O_4Br_4$  2) Anemonintetrabromid. Zers. bei 180° (Ar. 230, 205). — \*III, 355.  
 $C_{10}H_8O_4S$  \*3) 1-Oxynaphtalin-4-Sulfonsäure (J. pr. [2] 69, 85 C. 1904 [1] 813).  
 \*8) 2-Oxynaphtalin-6-Sulfonsäure. Pararosanilinsalz (C. 1904 [1] 1013).  
 \*10) 2-Oxynaphtalin-8-Sulfonsäure. (Na, HgCl) (D. R. P. 143726 C. 1903 [2] 474).  
 $C_{10}H_8O_4S_2$  1) Naphthalin- $\beta$ -Disulfinsäure (J. pr. [2] 68, 339 C. 1903 [2] 1172).  
 $C_{10}H_8O_5N_2$  7)  $\gamma$ -Keto- $\alpha$ -[2, 4-Dinitrophenyl]- $\alpha$ -Buten. Sm. 73—74° (M. 23, 1005 C. 1903 [1] 292).  
 8) Methylen-3-Nitrohippursäure. Sm. 165° (D. R. P. 153860 C. 1904 [2] 678).  
 $C_{10}H_8O_5S$  \*9) 1, 6-Dioxynaphtalin-3-Sulfonsäure (J. pr. [2] 69, 83 C. 1904 [1] 812).  
 15) 1, 7-Dioxynaphtalin-3-Sulfonsäure (J. pr. [2] 69, 89 C. 1904 [1] 813).  
 $C_{10}H_8O_6N_2$  12)  $\alpha\gamma$ -Diketo- $\alpha$ -[3, 5-Dinitrophenyl]butan. Sm. 121° (J. pr. [2] 69, 465 C. 1904 [2] 596).  
 13) Phenylhydrazonmethan- $\alpha$ ,  $\alpha$ , 4-Tricarbonsäure. Sm. 275° u. Zers. (B. 37, 4175 C. 1904 [2] 1704).  
 14) Dilaktam d.  $\gamma\delta$ -Diimidohexan- $\beta\beta\epsilon\epsilon$ -Tetracarbonsäure (A. 332, 129 C. 1904 [2] 189).  
 $C_{10}H_8O_7N_2$  6) 6-Nitro-4-Acetylamidobenzol-1, 3-Dicarbonsäure. Sm. 264° u. Zers. (G. 33 [2] 286 C. 1904 [1] 265).  
 $C_{10}H_8O_7S_2$  \*6) 2-Oxynaphtalin-3, 6-Disulfonsäure (D. R. P. 143448 C. 1903 [2] 403).  
 \*13) 1-Oxynaphtalin-4, 8-Disulfonsäure (J. pr. [2] 69, 81 C. 1904 [1] 812).  
 $C_{10}H_8O_8S_2$  \*6) 1, 8-Dioxynaphtalin-3, 6-Disulfonsäure (D. R. P. 147852 C. 1904 [1] 133).  
 $C_{10}H_8NCl$  \*3) 8-Chlor-1-Amidonaphtalin. Sm. 98° (D. R. P. 147852 C. 1904 [1] 132).  
 14) 5[oder 7]-Chlor-2-Methylechinolin. Sm. 78° (C. 1904 [2] 543).  
 15) 6-Chlor-2-Methylechinolin. Sm. 91°. HCl (C. 1904 [2] 543).  
 16) 8-Chlor-2-Methylechinolin. Sm. 64° (C. 1904 [2] 543).  
 $C_{10}H_8NBr$  13) 6-Brom-2-Methylechinolin. Sm. 96—97° (C. 1904 [2] 543).  
 $C_{10}H_8N_2S_2$  \*3) 1, 3-Di[Rhodanmethyl]benzol. Sm. 62° (B. 36, 1681 C. 1903 [2] 30).  
 $C_{10}H_8ON$  \*12) 3-Methyl-5-Phenylisoxazol. Sm. 68°; Sd. 151—152°<sub>10</sub> (C. r. 137, 796 C. 1904 [1] 43).  
 \*32) Methyläther d. 8-Oxychinolin. Sm. 40,5°; Sd. 282°<sub>743</sub> (C. 1903 [1] 36).  
 \*37) 2-Keto-1-Methyl-1, 2-Dihydrochinolin. Sm. 72°; Sd. 320° (B. 36, 1170 C. 1903 [1] 1363; B. 36, 1209 C. 1903 [1] 1418).  
 \*41) Anhydro-6-Oxychinolinmethyloxyhydrat (B. 36, 1170 C. 1903 [1] 1363).  
 \*51) 5-Amido-1-Oxynaphtalin (J. pr. [2] 69, 84 C. 1904 [1] 812).  
 \*54) 7-Amido-2-Oxynaphtalin (J. pr. [2] 69, 89 C. 1904 [1] 813).  
 \*55) 1-Naphtylhydroxylamin + H<sub>2</sub>O (oder C<sub>10</sub>H<sub>11</sub>O<sub>3</sub>N). Sm. 78—79° (D. R. P. 84138; B. 37, 3055 C. 1904 [2] 992).  
 57) 1-Keto-3-Aethylpseudoisindol. Sm. 210° (C. r. 138, 988 C. 1904 [1] 1446).  
 $C_{10}H_9ON_3$  13) 2, 8-Diamido-4-Imido-1-Keto-1, 4-Dihydronaphtalin. HCl (B. 34, 1226). — \*III, 277.  
 14)  $\gamma$ -Semicarbazon- $\alpha$ -Phenylpropin. Sm. 137—138° (C. r. 138, 1341 C. 1904 [2] 187).  
 15) 4-Nitroso-3-Methyl-5-Phenylpyrazol. Sm. 153° (A. 325, 194 C. 1903 [1] 647).  
 16) 4-Amido-6-Oxy-2-Phenyl-1, 3-Diazin. Sm. 252° (B. 37, 2268 C. 1904 [2] 198).

- $C_{10}H_9OCl_5$  2) Butyläther d. Pentachloroxybenzol. Sm. 15,5—16,5°; Sd. 343° (B. 37, 4020 C. 1904 [2] 1717).
- $C_{10}H_9OBr$  1) Methyläther d.  $\alpha$ -[p-Brom-2-Oxyphenyl]propin. Sd. 148—149°<sub>10</sub> (B. 36, 1190 C. 1903 [1] 1179).  
2)  $\alpha$ -Brom- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Buten. Sd. 169—170°<sub>20</sub> (Soc. 85, 464 C. 1904 [1] 1438).
- $C_{10}H_9OBr_3$  3) Methyläther d.  $\beta$ -Brom- $\alpha$ -[p-Dibrom-2-Oxyphenyl]propen. Sd. 172 bis 173°<sub>10</sub> (B. 36, 1191 C. 1903 [1] 1179).  
4) Methyläther d.  $\alpha\beta$ -Dibrom- $\alpha$ -[p-Brom-2-Oxyphenyl]propen. Fl. (B. 36, 1190 C. 1903 [1] 1179).  
5) Methyläther d.  $\beta$ -Brom- $\alpha$ -[3,5-Dibrom-4-Oxyphenyl]propen. Sm. 58° (B. 37, 1553 C. 1904 [1] 1438).
- $C_{10}H_9OBr_5$  3) Methyläther d. p-Dibrom-2-Oxy-1-[ $\alpha\beta\beta$ -Tribrompropyl]benzol. Fl. (B. 36, 1191 C. 1903 [1] 1179).  
4) Methyläther d. 3,5-Dibrom-4-Oxy-1-[ $\alpha\beta\beta$ -Tribrompropyl]benzol. Sm. 92° (B. 37, 1553 C. 1904 [1] 1438).
- $C_{10}H_9O_2N$  \*28) Indol-3-Methylcarbonsäure. Sm. 165° (B. 37, 1805 C. 1904 [1] 1610).  
\*37) Phenylimid d. Bernsteinsäure. Sm. 150° (C. 1903 [2] 432; B. 37, 1598 C. 1904 [1] 1418).  
\*53) 5-Amido-1,4-Dioxynaphtalin. HCl (A. 335, 149 C. 1904 [2] 1136).  
63) 2-Nitro-3-Methylinden. Sm. 107—108° (A. 336, 5 C. 1904 [2] 1465).  
64) 6-Methylamido-1,2-Benzpyron. Sm. 105—106° (Soc. 85, 1238 C. 1904 [2] 1124).  
65) 6-Oxy-2-Keto-1-Methyl-1,2-Dihydrochinolin + H<sub>2</sub>O. Sm. 218—220° (228°) wasserfrei. HJ (B. 36, 458 C. 1903 [1] 590; B. 36, 1175 C. 1903 [1] 1363).  
66) 8-Oxy-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 286° (B. 36, 1176 C. 1903 [1] 1364).  
67) Aldehyd d.  $\gamma$ -Oximido- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure. Sm. 103 bis 104° (C. 1903 [2] 1432; A. 330, 250 C. 1904 [1] 946).  
68) Imid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 90° (M. 24, 421 C. 1903 [2] 622).
- $C_{10}H_9O_2N_3$  \*3) 4-Oximido-5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 156° (A. 328, 75 C. 1903 [2] 249).  
\*27) Nitril d. 2,6-Diketo-4-Propyl-1,2,3,6-Tetrahydropyridin-3,5-Dicarbonsäure. NH<sub>3</sub>, Ag (A. 325, 218 C. 1903 [1] 439).  
30) 1-Oxy-4-Benzoyl-5-Methyl-1,2,3-Triazol. Zers. bei 190° (A. 325, 166 C. 1903 [1] 645).  
31) Amid d. 5-Keto-3-Phenyl-4,5-Dihydropyrazol-1-Carbonsäure. Sm. 184—185° (A. 331, 317 C. 1904 [2] 46).
- $C_{10}H_9O_2Br$  9) Methylenäther d. p-Brom-3,4-Dioxy-1-Propenylbenzol. Sm. 208° (C. 1904 [2] 1568).  
10) Methylester d.  $\beta$ -[4-Bromphenyl]akrylsäure. Sm. 79—80° (B. 37, 223 C. 1904 [1] 588).
- $C_{10}H_9O_2Br_3$  \*1) Methylenäther d. p-Brom-3,4-Dioxy-1-[ $\alpha\beta$ -Dibrompropyl]benzol. Sm. 110—111° (C. 1903 [1] 969).  
\*4) Methyläther d.  $\alpha$ -Bromäthyl-3,5-Dibrom-4-Oxyphenylketon. Sm. 101° (B. 37, 1549 C. 1904 [1] 1437).  
13) 3-Methyläther d. 2,5,6-Tribrom-3,4-Dioxy-1-Propenylbenzol. Sm. 118° (A. 329, 33 C. 1903 [2] 1436).  
14) Methyläther d. 2,5-Dibrom-3-Oxy-4-Keto-1-[ $\beta$ -Brompropyliden]-1,4-Dihydrobenzol. Zers. bei 175° (A. 329, 23 C. 1903 [2] 1436).  
15) Methyläther d. polym. 2,5-Dibrom-3-Oxy-4-Keto-1-[ $\beta$ -Brompropyliden]-1,4-Dihydrobenzol (A. 329, 25 C. 1903 [2] 1436).
- $C_{10}H_9O_2Br_5$  2) 3-Methyläther d. 2,5,6-Tribrom-3,4-Dioxy-1-[ $\alpha\beta$ -Dibrompropyl]benzol. Sm. 130° (A. 329, 30 C. 1903 [2] 1436).
- $C_{10}H_9O_3N$  \*5)  $\beta$ -Oximido- $\alpha\gamma$ -Diketo- $\alpha$ -Phenylbutan. Sm. 124—126° (A. 325, 136 C. 1903 [1] 643).  
45) Methyläther d. 5-Keto-3-[4-Oxyphenyl]-4,5-Dihydroisoxazol. Sm. 143° u. Zers. (C. 1897 [2] 616). — \*II, 1040.  
46) 6[oder 7]-Aethyläther d. 6[oder 7]-Oxy-1,4-Diketo-3-Methyl-1,2,3,4-Tetrahydroisochinolin. Zers. bei 240° (B. 37, 1979 C. 1904 [2] 237).  
47) Methylenhippursäure (D.R.P. 148669 C. 1904 [1] 411).

- $C_{10}H_9O_3N$  48) Methylester d.  $\beta$ -[4-Nitrosophenyl]akrylsäure. Sm. 111—112° (*Am.* 32, 395 *C.* 1904 [2] 1498).
- 49) Acetat d. 5-Oxy-1-Methylbenzoxazol. Sm. 55° (*B.* 35, 4205 *C.* 1903 [1] 146).
- $C_{10}H_9O_3N_2$  \*25) 4-[ $\alpha$ -Oximido- $\alpha$ -Phenyläthyl]-1,2,3,6-Dioxdiazin. Sm. 215°. Na (*A.* 330, 237 *C.* 1904 [1] 945).
- 28) 6-Nitro-2-Acetyl-5-Methylindazol. Sm. 203—204° (*B.* 37, 2593 *C.* 1904 [2] 660).
- 29) 5-Nitro-2-Acetyl-6-Methylindazol. Sm. 182—183° (*B.* 37, 2589 *C.* 1904 [2] 660).
- 30)  $\alpha\gamma$ -Laktam d.  $\alpha$ -Cyan- $\beta\gamma$ -Diimido- $\delta$ -Acetyl- $\epsilon$ -Ketohehexan- $\alpha$ -Carbonsäure. Sm. 175° (*A.* 332, 156 *C.* 1904 [2] 192).
- 31) Methylester d. 5-Oxy-1-Phenyl-1,2,3-Triazol-4-Carbonsäure +  $H_2O$ . Sm. 72—73°.  $NH_4$ , Na, Cu +  $2H_2O$ , Anilinsalz, Phenylhydrazinsalz, o-Tolidinsalz, Benzidinsalz, Dianisidinsalz (*B.* 35, 4049 *C.* 1903 [1] 169; *A.* 335, 29 *C.* 1904 [2] 1229).
- 32) Methylester d. 5-Keto-1-Phenyl-4,5-Dihydro-1,2,3-Triazol-4-Carbonsäure. Sm. 82—83°. o-Tolidinsalz (*B.* 35, 4049 *C.* 1903 [1] 169; *A.* 335, 63 *C.* 1904 [2] 1230).
- 33) Amid d.  $\alpha$ -Cyan- $\beta$ -[3-Nitrophenyl]propionsäure. Sm. 147—148° (*C.* 1904 [1] 878).
- 34) Amid d.  $\alpha$ -Cyan- $\beta$ -[4-Nitrophenyl]propionsäure. Sm. 168,5° (*C.* 1904 [1] 878).
- $C_{10}H_9O_3N_2$  2) 1-Ureido-5-Phenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 208° u. Zers. (*B.* 36, 3615 *C.* 1903 [2] 1380).
- $C_{10}H_9O_4N$  \*2) Methylenäther d.  $\beta$ -Nitro- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 98° (*A.* 332, 331 *C.* 1904 [2] 652).
- \*23) Methylester d.  $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 160° (*Am.* 32, 395 *C.* 1904 [2] 1498).
- \*26) Phenylimid d. d-Weinsäure. Sm. 225° u. Zers. (*Soc.* 83, 1365 *C.* 1904 [1] 85).
- \*35) Methylester d. 3-Keto-3,4-Dihydro-1,4-Benzoxazin-6-Carbonsäure. Sm. 193° (*A.* 325, 338 *C.* 1903 [1] 771).
- 39) 4,5-Methylenäther d. 4,5,6-Trioxy-2-Aethenyl-1-Oximidomethylbenzol (Oxim d. Norcotarnon). Sm. 202—203° (*B.* 36, 1531 *C.* 1903 [2] 52).
- 40) trans-1-[ $p$ -Nitrophenyl]-R-Trimethylen-2-Carbonsäure. Sm. 154° (*B.* 36, 3786 *C.* 1904 [1] 43).
- 41) 4-Amido-4-Oxy-3,4-Dihydrobenzopyran-2-Carbonsäure (*Soc.* 79, 471). — \*III, 553.
- 42) Laktone d.  $p$ -Nitro-1-[ $\alpha$ -Oxyisopropyl]benzol-2-Carbonsäure (Nitrodimethylphthalid). Sm. 131—132° (*B.* 37, 736 *C.* 1904 [1] 1078).
- 43) Methylester d. 1-Keto-2-Methyl-1,2-Dihydrobenzoxazol-4-Carbonsäure. Sm. 168° (*A.* 325, 328 *C.* 1903 [1] 770).
- $C_{10}H_9O_4N_2$  6)  $\gamma\delta$ -Dioximido- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten. Sm. 220° (*C.* 1904 [1] 28; *A.* 330, 253 *C.* 1904 [1] 946).
- $C_{10}H_9O_4Br$  11)  $\beta$ -Brom- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 137° (*B.* 37, 3063 *C.* 1904 [2] 1207).
- $C_{10}H_9O_6N$  \*14) 4-Acetylamidobenzol-1,3-Dicarbonsäure. Sm. 289,5° (*B.* 36, 1803 *C.* 1903 [2] 283).
- 26) Laktone d.  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha$ -Methoxyl- $\alpha$ -Phenyläthan-2-Carbonsäure. Sm. 110—111°. K (*B.* 36, 576 *C.* 1903 [1] 711).
- $C_{10}H_9O_6N_2$  9) Nitrat d. 4-[ $\beta$ -Oxy- $\beta$ -Phenyläthyl]-1,2,3,6-Dioxdiazin. Sm. 101 bis 102° (*C.* 1903 [2] 1432; *A.* 330, 249 *C.* 1904 [1] 946).
- $C_{10}H_9O_6N$  28)  $\alpha$ -[3-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure. Ba (*C.* 1904 [1] 878).
- 29) Aldehyd d. 5-Nitro-3-Acetoxy-4-Oxybenzol-4-Methyläther-1-Carbonsäure. Sm. 86° (*B.* 35, 4397 *C.* 1903 [1] 341).
- $C_{10}H_9O_6N_2$  4) 2-Nitro-4-Acetylamidophenyloxaminsäure. Sm. 228° u. Zers. Ba (*B.* 36, 414 *C.* 1903 [1] 630).
- 5) 3-Amido-4-Acetylamidophenyloxaminsäure. Sm. 209° (*B.* 36, 415 *C.* 1903 [1] 631).
- 6) Aethylester d. 4-Cyan-5-Nitro-3-Hydroxylamido-2-Oxybenzol-1-Carbonsäure. Sm. 186°.  $NH_4$  (*B.* 37, 1851 *C.* 1904 [1] 1493).

- $C_{10}H_9O_6N_3$  7) 2-Nitrophenylamid d. N-Acetoximidooxyessigsäure. Sm. 160° (*Soc* 81, 1568 *C.* 1903 [1] 157).  
 8) 3-Nitrophenylamid d. N-Acetoximidooxyessigsäure. Sm. 184° u. Zers. Na, K (*Soc.* 81, 1569 *C.* 1903 [1] 157).  
 9) 4-Nitrophenylamid d. N-Acetoximidooxyessigsäure. Sm. 182° u. Zers. (*Soc.* 81, 1570 *C.* 1903 [1] 158).
- $C_{10}H_9O_6N_5$  C 40,7 — H 3,0 — O 32,5 — N 23,7 — M. G. 295.  
 1) 1,3-Dimethylpurpursäure.  $NH_4$  (*Am.* 31, 668 *C.* 1904 [2] 317).  
 2) 1,3'-Dimethylpurpursäure.  $NH_4$  (*Am.* 31, 668 *C.* 1904 [2] 317).  
 3) 7-Aethylpurpursäure.  $NH_4 + H_2O$  (*Am.* 31, 676 *C.* 1904 [2] 318).
- $C_{10}H_9O_7N$  \*4) Nitroopiansäure. Sm. 168,5—169,5° (*B.* 36, 1541 *C.* 1903 [2] 112; *M.* 24, 796 *C.* 1904 [1] 163).
- $C_{10}H_9NCl_2$  5) Methylenchlorid d. Chinolin.  $2 + PtCl_4 + H_2O$  (*B.* 16, 2004; *A.* 326, 320 *C.* 1903 [1] 1088).
- $C_{10}H_9N_2Cl$  9) 3-Chlor-5-Methyl-1-Phenylpyrazol. Sd. 295° (*B.* 36, 718 *C.* 1903 [1] 776).
- $C_{10}H_9N_2J$  \*1) 2-Jod-1-Methyl-2-[3-Pyridyl]pyrrol (Jodnikotylin). Sm. 110° (*C. r.* 137, 861 *C.* 1904 [1] 104).
- $C_{10}H_{10}ON_2$  \*9) 3-Keto-5-Methyl-1-Phenyl-2,3-Dihydropyrazol. Sm. 167° (*B.* 36, 718 *C.* 1903 [1] 776).  
 \*57) 4,8-Diamido-1-Oxynaphtalin. 2HCl (*A.* 335, 155 *C.* 1904 [2] 1136).  
 \*61) Amid d.  $\alpha$ -Cyan- $\beta$ -Phenylpropionsäure. Sm. 133—133,5° (*A.* 325, 222 *C.* 1903 [1] 439).  
 \*63) 4,5-Diamido-1-Oxynaphtalin. 2HCl (*A.* 335, 152 *C.* 1904 [2] 1136).  
 70) 6-Amido-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 165° (*B.* 36, 1173 *C.* 1903 [1] 1363).  
 71) Nitril d. d- $\alpha$ -Benzoylamidopropionsäure. Sm. 115—120° (*Bl.* [3] 29, 1196 *C.* 1904 [1] 361).  
 72) Nitril d. l- $\alpha$ -Benzoylamidopropionsäure. Sm. 123,5° (*Bl.* [3] 29, 1196 *C.* 1904 [1] 361).  
 73) Nitril d. i- $\alpha$ -Benzoylamidopropionsäure. Sm. 108° (*Bl.* [3] 29, 1193 *C.* 1904 [1] 361).  
 74) Nitril d. r- $\alpha$ -Benzoylamidopropionsäure. Sm. 161—162° (*Bl.* [3] 29, 1196 *C.* 1904 [1] 361).  
 75) Nitril d. Phenylacetylamoessigsäure. Sm. 90,5° (*B.* 36, 1648 *C.* 1903 [2] 32).  
 76) Nitril d. 4-Methylbenzoylamidoessigsäure. Sm. 153° (*B.* 36, 1648 *C.* 1903 [2] 32).  
 77) Nitril d. 2-Propionylamidobenzol-1-Carbonsäure. Sm. 119° (*C.* 1903 [1] 175).  
 78) Nitril d. 3-Propionylamidobenzol-1-Carbonsäure. Sm. 83,5—84° (*C.* 1904 [2] 101).  
 79) Nitril d. 4-Propionylamidobenzol-1-Carbonsäure. Sm. 169° (*C.* 1903 [2] 113).
- $C_{10}H_{10}ON_4$  15) 4,5-Diamido-6-Oxy-2-Phenyl-1,3-Diazin. HCl (*B.* 37, 2269 *C.* 1904 [2] 198).  
 16) Hydrazid d. 5-Phenylpyrazol-3-Carbonsäure. Sm. 205° (*B.* 37, 2203 *C.* 1904 [2] 323).
- $C_{10}H_{10}OBr_2$  4) Methyläther d.  $\beta$ -Brom- $\alpha$ -[ $\beta$ -Brom-2-Oxyphenyl]propen. Sd. 160 bis 162° (*B.* 36, 1189 *C.* 1903 [1] 1179).
- $C_{10}H_{10}OBr_4$  3) Methyläther d.  $\beta$ -Brom-2-Oxy-1-[ $\alpha\beta\beta$ -Tribrompropyl]benzol. Sm. 105 bis 106° (*B.* 36, 1190 *C.* 1903 [1] 1179).  
 4) Methyläther d.  $\beta$ -Dibrom-2-Oxy-1-[ $\alpha\beta$ -Dibrompropyl]benzol (*B.* 36, 1191 *C.* 1903 [1] 1179).  
 5) Methyläther d. 3,5-Dibrom-4-Oxy-1-[ $\alpha\beta$ -Dibrompropyl]benzol. Sm. 101,5° (*B.* 37, 1550 *C.* 1904 [1] 1438).
- $C_{10}H_{10}O_2N_2$  \*10) 2,4-Diketo-3-Phenyl-1-Methyltetrahydroimidazol. Sm. 199,5° (*Bl.* [3] 29, 1200 *C.* 1904 [1] 354).  
 \*32) Anhydrid d.  $\alpha$ -Diisonitrosoanethol. Sm. 63° (97°) (*A.* 329, 267 *C.* 1904 [1] 32).  
 \*45) 1,2-Phenylamid d. Bernsteinsäure. Sm. 236° (*A.* 327, 21, 29 *C.* 1903 [1] 1336).  
 \*52) 2,5-Diketo-4-Methyl-1-Phenyltetraimidazol. Sm. 172° (*Bl.* [3] 29, 1194 *C.* 1904 [1] 361).

- $C_{10}H_{10}O_2N_2$  60)  $\gamma\delta$ -Dioximido- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 201—202° u. Zers. (*C.* 1903 [2] 1432; *A.* 330, 248 *C.* 1904 [1] 946).
- 61) Peroxyd d. 4-Oxy-1- $[\alpha\beta$ -Dioximidopropyl]benzol-4-Methyläther. Sm. 97° (*B.* 36, 3022 *C.* 1903 [2] 1002).
- 62) Äthyläther d. 5-Oxy-3-Phenyl-1,2,4-Oxdiazol. Sm. 36° (*Am.* 32, 371 *C.* 1904 [2] 1507).
- 63) Äthyläther d. 3-Oxy-5-Phenyl-1,2,4-Oxdiazol. Sm. 47—48° (*Am.* 32, 370 *C.* 1904 [2] 1507).
- 64) Äthyläther d. 5-Oxy-2-Phenyl-1,3,4-Oxdiazol. +  $AgNO_3$  (P. Gutmann, Dissert., Heidelberg 1903).
- 65) 3-Nitro-1-Äthylindol. Sm. 102° (*G.* 34 [2] 61 *C.* 1904 [2] 710).
- 66) Benzimidazol-2-[Äthyl- $\beta$ -Carbonsäure]. Sm. 226° (*A.* 327, 23 *C.* 1903 [1] 1336).
- 67) Methylester d.  $\beta$ -Phenyl- $\alpha$ -Diazopropionsäure. Sd. 85—87°<sub>12</sub> (*B.* 37, 1269 *C.* 1904 [1] 1334).
- 68) Äthylester d. Phenyl diazoessigsäure. Fl. (*B.* 37, 1266 *C.* 1904 [1] 1333).
- 69) Äthylester d. 3-Cyanphenylamidoameisensäure. Sm. 61—62° (*C.* 1904 [2] 102).
- 70) 2-Amidophenylimid d. Bernsteinsäure. Sm. 230—232° u. Zers. (*A.* 337, 46 *C.* 1903 [1] 1336).
- 71) 3-Amidophenylimid d. Bernsteinsäure. Sm. 196—198° (*A.* 327, 47 *C.* 1903 [1] 1336).
- 72) 4-Amidophenylimid d. Bernsteinsäure. Sm. 236° (*A.* 327, 25 *C.* 1903 [1] 1336).
- $C_{10}H_{10}O_2N_4$  9) 1-Phenylamido-5-Methyl-1,2,3-Triazol-4-Carbonsäure +  $H_2O$ . Sm. 162° (wasserfrei) (*A.* 325, 158 *C.* 1903 [1] 644).
- 10) Azid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 54° (*J. pr.* [2] 70, 145 *C.* 1904 [2] 1394).
- $C_{10}H_{10}O_2Cl_2$  \*3) 3,6-Dichlor-5-Isopropyl-2-Methyl-1,4-Benzochinon. Sm. 99° (*A.* 336, 26 *C.* 1904 [2] 1467).
- 11) 3,4-Dichlormethylenäther d. 3,4-Dioxy-1-Propylbenzol. Sd. 142 bis 145°<sub>10</sub> (*C. r.* 138, 423 *C.* 1904 [1] 797).
- 12) Dichlormethylenäther d. 3,4-Dioxy-1-Isopropylbenzol. Sd. 131 bis 134°<sub>12</sub> (*C. r.* 138, 1703 *C.* 1904 [2] 436).
- 13) Benzoat d.  $\alpha\gamma$ -Dichlor- $\beta$ -Oxypropan. Sd. 296° (*C.* 1903 [1] 134).
- $C_{10}H_{10}O_2Cl_4$  2) Diäthyläther d. 2,4,5,6-Tetrachlor-1,3-Dioxybenzol. Sm. 73° (*Am.* 31, 381 *C.* 1904 [1] 1409).
- $C_{10}H_{10}O_2Br_2$  \*17) Methylester d.  $i\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Sm. 117° (*Soc.* 83, 670 *C.* 1903 [2] 115).
- 21) 3-Methyläther d. 2,5-Dibrom-3,4-Dioxy-1-Propenylbenzol. Sm. 102° (*A.* 329, 25 *C.* 1903 [2] 1436).
- 22) Methyläther d. 5-Brom-3-Oxy-4-Keto-1- $[\beta$ -Brompropyliden]-1,4-Dihydrobenzol. Zers. oberh. 140° (*A.* 329, 13 *C.* 1903 [2] 1434).
- $C_{10}H_{10}O_2Br_4$  3) 3-Methyläther d. 2,5-Dibrom-3,4-Dioxy-1- $[\alpha\beta$ -Dibrompropyl]-benzol. Sm. 124° (*A.* 329, 22 *C.* 1903 [2] 1435).
- $C_{10}H_{10}O_3N_2$  35) s-Acetylbenzoylharnstoff. Sm. 187° (*B.* 36, 3217 *C.* 1903 [2] 1056).
- 36) Äthyläther d. 5-Oxy-4-Phenyl-1,2,3,6-Dioxdiazin. Sm. 83° (*A.* 328, 253 *C.* 1903 [2] 1001).
- 37) Nitril d. 6-Nitro-2-Oxybenzolpropyläther-1-Carbonsäure. Sm. 105° (*R.* 23, 35 *C.* 1904 [1] 1137).
- $C_{10}H_{10}O_3Br_2$  14) Methylenäther d. p-Brom-3,4-Dioxy-1- $[\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 89° (*C.* 1903 [1] 969).
- $C_{10}H_{10}O_3S$  2) Verbindung (aus Benzophenonoxim). Sm. 86° (*G.* 34 [1] 103 *C.* 1904 [1] 1011).
- $C_{10}H_{10}O_4N_2$  \*15) Monomethylester d. Phenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 125—126° (*B.* 37, 4171 *C.* 1904 [2] 1703).
- \*21)  $\alpha$ -Phenylhydrazonäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 98—102° (*A.* 331, 102 *C.* 1904 [1] 931).
- 23)  $\alpha$ -Oximido- $\beta$ -Nitro- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 84° (*A.* 329, 258 *C.* 1904 [1] 32).
- 24) Dimethyläther d. 5,6-Dioxy-1,4-Diketo-1,2,3,4-Tetrahydro-2,3-Benzodiazin? (Hydrazid d. Hemipinsäure). Sm. 227—229° (*M.* 24, 381 *C.* 1903 [2] 493).

- $C_{10}H_{10}O_4N_2$  25) 3-Acetylamidophenyloxaminsäure. Sm. 209° u. Zers. (B. 36, 413 C. 1903 [1] 630).  
 26) 4-Acetylamidophenyloxaminsäure. Sm. oberhalb 270° (B. 36, 414 C. 1903 [1] 630).  
 27) Benzoat d.  $\alpha$ -Nitro- $\alpha$ -Oximidopropan. Sm. 85° (G. 33 [1] 511 C. 1903 [2] 938).
- $C_{10}H_{10}O_4N_4$  8) Dilaktam d.  $\gamma\delta$ -Diimidohexan- $\beta\beta\epsilon\epsilon$ -Tetracarbonsäure- $\beta\epsilon$ -Diamid (A. 332, 128 C. 1904 [2] 189).  
 9)  $\alpha\alpha$ -Diamid d. Phenylhydrazonmethan- $\alpha\alpha$ ,2-Tricarbonsäure. Sm. 275° (B. 37, 4173 C. 1904 [2] 1703).  
 10)  $\alpha\alpha$ -Diamid d. Phenylhydrazonmethan- $\alpha\alpha$ ,3-Tricarbonsäure. Sm. oberh. 285° (B. 37, 4174 C. 1904 [2] 1704).  
 11)  $\alpha\alpha$ -Diamid d. Phenylhydrazonmethan- $\alpha\alpha$ ,4-Tricarbonsäure. Sm. oberh. 285° (B. 37, 4175 C. 1904 [2] 1704).  
 12)  $\alpha$ -Semicarbazid d. Phenylimidoessigsäure-2-Carbonsäure. Zers. bei 278–280°.  $Ca + 11H_2O$ ,  $Ba + 9\frac{1}{2}H_2O$  (A. 332, 243 C. 1904 [2] 39).
- $C_{10}H_{10}O_4J_2$  3) Diacetat d. 3-Jod-1-Jodobenzol. Sm. 160° (B. 37, 1303 C. 1904 [1] 1339).
- $C_{10}H_{10}O_6N_2$  \*10) 2-Nitrophenylmonamid d. Bernsteinsäure. Sm. 131° (A. 327, 54 C. 1903 [1] 1336).  
 \*11) 4-Nitrophenylmonamid d. Bernsteinsäure. Sm. 202° (A. 327, 55 C. 1903 [1] 1336).  
 17) Acetyl-4-Nitrophenylamidoessigsäure. Sm. 191–192° (D.R.P. 152012 C. 1904 [2] 70).  
 18) 3-Nitro-4-Acetylamidobenzol-1-Carbonsäure. Sm. 190° (B. 37, 1029 C. 1904 [1] 1207).  
 19) Aethylester d. 2-Nitrophenyloxaminsäure. Sm. 113° (Soc. 81, 1568 C. 1903 [1] 157).  
 20) Aethylester d. 4-Nitrophenyloxaminsäure. Sm. 166° (Soc. 81, 1570 C. 1903 [1] 158).  
 21) 3-Nitrophenylmonamid d. Bernsteinsäure. Sm. 181–182° (A. 327, 54 C. 1903 [1] 1336).
- $C_{10}H_{10}O_6N_2$  11) Methylenäther d. 2,6-Dinitro-3,4-Dioxy-1-Propylbenzol. Sm. 121° (Ar. 242, 90 C. 1904 [1] 1007).  
 12)  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -[2,4-Dinitrophenyl]butan. Sm. 63–64° (M. 23, 1003 C. 1903 [1] 292).  
 13) Dimethylester d. 6-Nitro-4-Amidobenzol-1,3-Dicarbonsäure. Sm. 153° (G. 33 [2] 288 C. 1904 [1] 265).  
 14) Aethylester d. 4,6-Dinitro-1-Methylbenzol-3-Carbonsäure. Sm. 61–62° (G. 33 [2] 279 C. 1904 [1] 265).  
 15) Amid d. Oxyessig-2-Nitrophenyläthersäure-4-Carbonsäuremethylester. Sm. 186° (A. 325, 336 C. 1903 [1] 771).
- $C_{10}H_{10}O_8N_4$  3) Propylester d. 2,4,6-Trinitrophenylamidoameisensäure. Sm. 139° (Soc. 85, 652 C. 1904 [2] 310).  
 4) Isopropylester d. 2,4,6-Trinitrophenylamidoameisensäure. Sm. 177,5° (Soc. 85, 652 C. 1904 [2] 310).
- $C_{10}H_{10}O_8N_6$  C 35,1 — H 2,9 — O 37,4 — N 24,6 — M. G. 342.  
 1) Verbindung +  $2H_2O$  (aus Alloxan u. Glykol) (A. 333, 68 C. 1904 [2] 772).
- $C_{10}H_{10}O_8S_2$  1) 1,3-Phenylendi[Sulfonessigsäure].  $Na_2 + 3H_2O$  (J. pr. [2] 68, 327 C. 1903 [2] 1171).
- $C_{10}H_{10}N_2S$  9) Methyläther d. 5-Merkapto-1-Phenylpyrazol. Sd. 142–143°<sub>14</sub> (A. 331, 223 C. 1904 [1] 1220).  
 10) 5-Thiocarbonyl-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 109°; Sd. 294° (B. 37, 2775 C. 1904 [2] 711).  
 11) 4-Thiocarbonyl-2-Aethyl-4,5-Dihydro-1,3-Benzdiazin. Sm. 203 bis 204° u. Zers. (C. 1903 [1] 1270).
- $C_{10}H_{10}N_3Cl$  3) 5-Chlor-4-Amido-3-Methyl-1-Phenylpyrazol. Sm. 49°. HCl (D.R.P. 153861 C. 1904 [2] 680).
- $C_{10}H_{10}ClBr$  1)  $\alpha$ -Chlor- $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -Buten. Sd. 140–145°<sub>8</sub> (B. 36, 774 C. 1903 [1] 835).
- $C_{10}H_{11}ON$  \*2)  $\gamma$ -Imido- $\alpha$ -Keto- $\alpha$ -Phenylbutan (Benzoylacetamin). Sm. 143° (B. 37, 585 C. 1904 [1] 940).

- $C_{10}H_{11}ON$  \*7) 2-Oximido-1, 2, 3, 4-Tetrahydronaphtalin (*B.* 36, 709 *C.* 1903 [1] 818).  
 \*46) 1-Oximido-2-Methyl-2, 3-Dihydroinden. Sm. 104° (*Soc.* 83, 916 *C.* 1903 [2] 504).  
 51)  $\beta$ -Amido- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 125° (*Soc.* 83, 378 *C.* 1903 [1] 845, 1144).  
 52)  $\gamma$ -Oximido- $\alpha$ -[4-Methylphenyl]propen. Sm. 135—136° (*B.* 36, 851 *C.* 1903 [1] 975).  
 53) 1-[ $\alpha$ -Amidoäthyl]benzofuran. Sd. 140°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), (HCl, HgCl<sub>2</sub>), HBr, HJ (*B.* 36, 2868 *C.* 1903 [2] 832).  
 54) Methyläther d. 3-Oxy-2-Methylindol. Sm. 82—83° (*G.* 33 [1] 321 *C.* 1903 [2] 281).  
 55) Laktam d.  $\gamma$ -Amido- $\gamma$ -Phenylbuttersäure. Sm. 91° (*B.* 36, 174 *C.* 1903 [1] 445).  
 56) Amid d.  $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure. Sm. 130° (*B.* 36, 174 *C.* 1903 [1] 445).  
 57) Amid d. trans-1-Phenyl-R-Trimethylen-2-Carbonsäure. Sm. 187 bis 188° (*B.* 36, 3784 *C.* 1904 [1] 42).  
 58) Phenylamid d. Propen- $\beta$ -Carbonsäure (Ph. d. Methakrylsäure). Sm. 87° (*B.* 36, 1269 *C.* 1903 [1] 1219).
- $C_{10}H_{11}ON_3$  22)  $\alpha$ -[ $\alpha$ -Cyanäthyl]- $\beta$ -Phenylharnstoff. Sm. 135° (*Bl.* [3] 29, 1194 *C.* 1904 [1] 361).  
 23)  $\alpha$ -Cyanmethyl- $\alpha$ -Methyl- $\beta$ -Phenylharnstoff. Sm. 83° (*Bl.* [3] 29, 1200 *C.* 1904 [1] 354).  
 24) 2-Semicarbazon-2, 3-Dihydroinden. Sm. 203—205° (*A.* 336, 3 *C.* 1904 [2] 1465).  
 25) Imidoäther d. Phenylcyanarbodiimid. Sm. 126—127° (*B.* 37, 1684 *C.* 1904 [1] 1491).  
 26) Äthyläther d. 5-Oxy-1-Phenyl-1, 2, 3-Triazol. Sm. 58—59° (*A.* 335, 80 *C.* 1904 [2] 1231).  
 27) Nitril d.  $\alpha$ -[Methyl-4-Nitrosophenylamido]propionsäure. Sm. 75,5° (*B.* 36, 759 *C.* 1903 [1] 962).
- $C_{10}H_{11}OCl$  \*14) Chlorid d.  $\alpha$ -Phenylpropan- $\beta$ -Carbonsäure. Sd. 120—121°, (*Soc.* 83, 1008 *C.* 1903 [2] 663; *Soc.* 85, 447 *C.* 1904 [1] 1445).  
 15) Chlorid d.  $i$ - $\alpha$ -Phenylpropan- $\beta$ -Carbonsäure. Fl. (*Soc.* 83, 915 *C.* 1903 [2] 504).
- $C_{10}H_{11}OBr$  8)  $p$ -Brom- $p$ -Oxy-1, 2, 3, 4-Tetrahydronaphtalin. Sm. 112° (*C. r.* 139, 673 *C.* 1904 [2] 1654).
- $C_{10}H_{11}OBr_3$  \*2) Methyläther d. 3-Brom-4-Oxy-1-[ $\alpha$  $\beta$ -Dibrompropyl]benzol. Sm. 112,5° (*B.* 37, 1546 *C.* 1904 [1] 1437).  
 8) 2, 6,  $p$ -Tribrom-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 50—51° (*M.* 24, 72 *C.* 1903 [1] 767).  
 9) Methyläther d.  $p$ -Brom-2-Oxy-1-[ $\alpha$  $\beta$ -Dibrompropyl]benzol. Sm. 84 bis 85° (*B.* 36, 1189 *C.* 1903 [1] 1179).  
 10) Methyläther d. 3, 6-Dibrom-5-Oxy-2-Brommethyl-1, 4-Dimethylbenzol. Sm. 122—124° (*A.* 334, 302 *C.* 1904 [2] 985).
- $C_{10}H_{11}O_2N$  \*11) Methyl-4-Acetylamidophenylketon. Sm. 166—167° (*B.* 36, 394 *C.* 1903 [1] 723).  
 \*54) Methyläther d. 5-Oxy-1, 3-Dimethylbenzoxazol. Sm. 71—72° (*B.* 36, 892 *C.* 1903 [1] 966).  
 67)  $\gamma$ -Nitro- $\alpha$ -Phenyl- $\beta$ -Methylpropen. Fl. (*C.* 1904 [1] 1496).  
 68) trans-1-[ $p$ -Amidophenyl]-R-Trimethylen-2-Carbonsäure. HCl (*B.* 36, 3786 *C.* 1904 [1] 43).  
 69) Acetat d.  $\gamma$ -Oxy- $\beta$ -[2-Pyridyl]propen. Sd. 140—144°, (2HCl, PtCl<sub>4</sub>) (*B.* 37, 744 *C.* 1904 [1] 1090).  
 70) Methylamid d. Benzoylessigsäure. Sm. 104—105° (*C.* 1904 [2] 905).
- $C_{10}H_{11}O_2N_3$  \*20) Äthyläther d. 3-Oxy-5-Keto-1-Phenyl-4, 5-Dihydro-1, 2, 4-Triazol. Sm. 152° (*B.* 36, 3146 *C.* 1903 [2] 1073).  
 25) Monosemicarbazon d.  $\alpha$  $\beta$ -Diketo- $\alpha$ -Phenylpropan. Sm. 213° u. Zers. (*B.* 36, 3187 *C.* 1903 [2] 939).  
 26) Methyläther d. 3-Oxy-5-Keto-4-Methyl-1-Phenyl-4, 5-Dihydro-1, 2, 4-Triazol. Sm. 95° (*B.* 36, 3149 *C.* 1903 [2] 1073).
- $C_{10}H_{11}O_2Cl$  17) Methylenäther d. 3, 4-Dioxy-1-[ $\alpha$ -Chlorpropyl]benzol. Fl. 2 + PtCl<sub>4</sub> + Pyridin, + AuCl<sub>3</sub> + Pyridin (*C.* 1904 [2] 1568).

- $C_{10}H_{11}O_2Br$  19) 3-Methyläther d. 5-Brom-3,4-Dioxy-1-Propenylbenzol (A. 329, 15 C. 1903 [2] 1435).
- 20) Methyläther d. 3-Oxy-4-Keto-1- $[\beta$ -Brompropylen]-1,4-Dihydrobenzol. Fl. (A. 329, 9 C. 1903 [2] 1434).
- $C_{10}H_{11}O_2Br_3$  \*1) 3-Methyläther d. 5-Brom-3,4-Dioxy-1- $[\alpha\beta$ -Dibrompropyl]benzol. Sm. 138° (A. 329, 12 C. 1903 [2] 1434).
- $C_{10}H_{11}O_2J$  4) 3-Methyläther d. p-Jod-3,4-Dioxy-1-Allylbenzol (Jodeugenol). Sm. 78° u. Zers. (C. 1903 [2] 306).
- $C_{10}H_{11}O_3N$  \*18) Phenylacetylamoessigsäure. Sm. 136° (B. 36, 1649 C. 1903 [2] 32).
- \*36) syn- $\gamma$ -Oximido- $\gamma$ -Phenylbuttersäure. Sm. 129° (M. 24, 82 C. 1903 [1] 769).
- \*47) Methylester d. Phenylimidooxyessigmethyläthersäure. Sd. 130 bis 132°<sub>12</sub> (Soc. 85, 988 C. 1904 [2] 831).
- \*50) 1-Methylester d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 110—112° (M. 24, 953 C. 1904 [1] 916).
- \*57) Acetat d. 2-Acetylamo-1-Oxybenzol. Sm. 124,5° (B. 36, 2050 C. 1903 [2] 383).
- 85) Methyläther d.  $\beta$ -Nitro- $\alpha$ -[4-Oxyphenyl]propen. Sm. 48° (47°); Sd. 180—190°<sub>12</sub> (B. 20, 2983; A. 329, 263 C. 1904 [1] 32; A. 332, 319 C. 1904 [2] 651).
- 86) Äthyläther d.  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sd. 143°<sub>14</sub> (A. 328, 242 C. 1903 [2] 999).
- 87) 3,4-Methylenäther d.  $\beta$ -Oximido- $\alpha$ -[3,4-Dioxyphenyl]propan. Sm. 86—87° (A. 332, 332 C. 1904 [2] 652).
- 88) Anhydrid d.  $\beta$ -Diisonitrosoanethol. Sm. 128° (B. 36, 3022 C. 1903 [2] 1002).
- 89) 2-Acetylphenylamoessigsäure. Sm. 225° (B. 32, 3234). — \*III, 96.
- 90)  $\alpha$ -[4-Methoxyphenyl]imidopropionsäure (G. 34 [2] 272 C. 1904 [2] 1454).
- 91) 2-Äthylformylamidobenzol-1-Carbonsäure. Sm. 119,5° (B. 36, 1806 C. 1903 [2] 284).
- 92) Methylester d. Methylphenyloxaminsäure. Sd. 170—175°<sub>13</sub> (Soc. 85, 988 C. 1904 [2] 831).
- 93) Methylester d. 4-Methylphenyloxaminsäure. Sm. 145° (Soc. 85, 995 C. 1904 [2] 831).
- 94) Phenylamid d. Acetoxylessigsäure. Sm. 89—90° (B. 37, 3975 C. 1904 [2] 1605).
- 95) Oxim d. Verbindung  $C_{10}H_{10}O_3$  (aus Isosafrol). Sm. 89° (B. 36, 3580 C. 1903 [2] 1363).
- $C_{10}H_{11}O_3N_3$  \*1) Benzoylamidoacetylarnstoff (J. pr. [2] 70, 241 C. 1904 [2] 1462).
- 17) 3,5-Diketo-2-Acetyl-4-Methyl-1-Phenyltetrahydro-1,2,4-Triazol. Sm. 94—95° (B. 36, 3151 C. 1903 [2] 1073).
- 18) Mono[4-Methylphenylamid] d. Oximidomalonaminsäure. Sm. 183° u. ger. Zers. (Soc. 83, 33 C. 1903 [1] 73, 441).
- $C_{10}H_{11}O_3Cl$  \*5) 4-Chloracetat d. 3,4-Dioxy-1-Methylbenzol-3-Methyläther. Fl. (Ar. 240, 639 C. 1903 [1] 24).
- $C_{10}H_{11}O_3Br_3$  6) 3-Methyläther d. 2,5-Dibrom-3,4-Dioxy-1- $[\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 127—128° (A. 329, 27 C. 1903 [2] 1436).
- $C_{10}H_{11}O_4N$  \*2)  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -[2-Nitrophenyl]butan (o-Nitrophenylmilchsäureketon) (D.R.P. 146294 C. 1903 [2] 1299).
- 65) Methylenäther d. 6-Nitro-3,4-Dioxy-1-Propylbenzol (Nitrodihydro-safrol). Sm. 36° (Ar. 242, 86 C. 1904 [1] 1007).
- 66) Aldehyd d. 2-Acetylamo-3,4-Dioxybenzol-3-Methyläther-1-Carbonsäure. Sm. 97° (C. 1903 [2] 31).
- 67) Methylester d. 3-Acetylamo-4-Oxybenzol-1-Carbonsäure. Sm. 198° (A. 325, 320 C. 1903 [1] 770).
- 68) Dimethylester d. Phenylamin-NN-Dicarbonsäure. Sm. 142—143° (B. 37, 3682 C. 1904 [2] 1495).
- 69)  $\beta$ -Oxyäthylester d. Benzoylamidoameisensäure. Sm. 148° (B. 36, 3220 C. 1903 [2] 1056).
- 70) Acetat d. 5-Nitro-2-Oxy-1,4-Dimethylbenzol. Sm. 72—73° (B. 37, 2594 C. 1904 [2] 660).
- $C_{10}H_{11}O_4N_3$  \*3) 2-Nitro-1,4-Di[Acetylamo]benzol (D.R.P. 146916 C. 1904 [1] 234; D.R.P. 152717 C. 1904 [2] 799).

- $C_{10}H_{11}O_4N_3$  16) 4-Nitro-1,3-Di[Acetylamido]benzol (D.R.P. 147729 *C.* 1904 [1] 235).  
 $C_{10}H_{11}O_5N$  41)  $\gamma$ -Keto- $\alpha$ -[4-Nitrophenyl]butan. Sm. 40—41° (*B.* 37, 1994 *C.* 1904 [2] 26).  
 42) Säure (aus d. Amid d. Oxyessig-2-Nitrophenyläthersäure-4-Carbonsäure-methylester). Sm. 191° (*A.* 325, 338 *C.* 1903 [1] 771).  
 43) Oxim d. Maticosäurealdehyd. Sm. 154° (*B.* 35, 4358 *C.* 1903 [1] 331).  
 44) Aethylester d.  $\alpha$ -Oxy- $\alpha$ -[Nitrophenyl]essigsäure. Sm. 49—50° (*B.* 37, 949 *C.* 1904 [1] 1218).  
 45) 3-Aethylester d. 4-Oxybenzol-1-Carbonsäure-3-Amidoameisensäure. Sm. noch nicht bei 280° (*A.* 325, 323 *C.* 1903 [1] 770).  
 46) Aethyl-6-Nitro-2-Methylphenylester d. Kohlensäure. Sm. 32—33° (*Am.* 32, 21 *C.* 1904 [2] 696).  
 47) Aethyl-6-Nitro-3-Methylphenylester d. Kohlensäure. Fl. (*Am.* 32, 20 *C.* 1904 [2] 696).  
 48) Aethyl-2-Nitro-4-Methylphenylester d. Kohlensäure. Sm. 56° (*Am.* 32, 15 *C.* 1904 [2] 695).  
 49) Verbindung (aus d. Glykosaminsäure). Sm. 125° (*B.* 35, 4014 *C.* 1903 [1] 390).  
 $C_{10}H_{11}O_5N_3$  12) Aethylester d.  $\alpha$ -[3-Nitrophenyl]harnstoff- $\beta$ -Carbonsäure. Sm. 188° (*Soc.* 81, 1569 *C.* 1903 [1] 157).  
 13) Aethylester d.  $\alpha$ -[4-Nitrophenyl]harnstoff- $\beta$ -Carbonsäure. Sm. 220° u. Zers. (*Soc.* 81, 1570 *C.* 1903 [1] 158).  
 $C_{10}H_{11}O_5Br$  1) 2-Brom-3,4,5-Trioxybenzotrimethyläther-1-Carbonsäure. Sm. 151° (*M.* 19, 598). — \*II, 1112.  
 $C_{10}H_{11}O_6Br$  1) Gem. Anhydrid d. Essigsäure u.  $\beta$ -Brom- $\alpha$ -Keto- $\beta$ -Buten- $\alpha\gamma$ -Dicarbonsäure- $\alpha$ -Aethylester. Fl. (*R.* 23, 151 *C.* 1904 [2] 194).  
 $C_{10}H_{11}O_6N_5$  3) 2,4,6-Trinitro-5-Aethylnitramido-1,3-Dimethylbenzol. Sm. 85° (*R.* 21, 331 *C.* 1903 [1] 78).  
 $C_{10}H_{11}O_{10}N_7$  C 30,8 — H 2,8 — O 41,1 — N 25,2 — M. G. 389.  
 1) 2,4,6-Trinitro-1,3-Di[Aethylnitramido]benzol. Sm. 165° (*R.* 21, 326 *C.* 1903 [1] 80).  
 $C_{10}H_{11}NS$  10) Allylamid d. Benzolthiocarbonsäure. Sd. 214—215°<sub>17</sub> (*B.* 37, 878 *C.* 1904 [1] 1004).  
 $C_{10}H_{11}N_2Br$  1) 4-oder-5-Brom-1-Methyl-2-[3-Pyridyl]-2,3-Dihydropyrrol. (HBr, Br<sub>2</sub>) (*C. r.* 137, 862 *C.* 1904 [1] 104).  
 $C_{10}H_{11}N_3S$  \*2) Aethyläther d.  $\alpha$ -Cyanimido- $\alpha$ -Phenylamido- $\alpha$ -Merkaptomethan. (Aethylcyanamid d. Phenylamidothioameisensäure). Sm. 119—120° (*A.* 331, 297 *C.* 1904 [2] 33).  
 5)  $\alpha$ -[ $\alpha$ -Cyanäthyl]- $\beta$ -Phenylthioharnstoff (*B.* [3] 29, 1195 *C.* 1904 [1] 361).  
 $C_{10}H_{11}ClS_3$  1) Verbindung (aus Acetylchlorid u. Trithiodibutolakton) (*B.* 34, 3405). — \*III, 594.  
 $C_{10}H_{12}ON_2$  41)  $\alpha$ -Methylphenylhydrazon- $\beta$ -Ketopropan. Sm. 64° (*A.* 247, 201). — IV, 757.  
 42) Phenylhydrazid d. Crotonsäure. Sm. 190° (*B.* 36, 1100 *C.* 1903 [1] 1140).  
 $C_{10}H_{12}OBr_2$  \*2) 3,5-Dibrom-2-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 219—220° (*A.* 333, 358 *C.* 1904 [2] 1116).  
 7) 2,6-Dibrom-4-Oxy-1-tert. Butylbenzol. Sm. 70—71° (*Soc.* 83, 330 *C.* 1903 [1] 876).  
 8) 2,6-Dibrom-3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 180—186°<sub>17-20</sub> (*M.* 24, 70 *C.* 1903 [1] 767; *A.* 333, 354 *C.* 1904 [2] 1116).  
 9)  $\beta$ -Bromäthyläther d. 5-Brom-4-Oxy-1,3-Dimethylbenzol. Sd. 172 bis 173°<sub>19</sub> (*B.* 36, 2875 *C.* 1903 [2] 834).  
 10) 2,4-Dibrom-1-Keto-3-Methyl-6-Isopropyl-1,4-Dihydrobenzol. Fl. (*M.* 24, 68 *C.* 1903 [1] 767).  
 $C_{10}H_{12}O_2N_2$  \*19) 1,2-Di[Acetylamido]benzol. Sm. 186° (*C.* 1904 [1] 102; *B.* 37, 3116 *C.* 1904 [2] 1316).  
 \*20) 1,3-Di[Acetylamido]benzol. Sm. 192—195° (*A.* 327, 33 *C.* 1903 [1] 1336).  
 \*37)  $\alpha$ -Phenylhydrazonbuttersäure. Sm. 144—145° (*A.* 331, 124 *C.* 1904 [1] 932).  
 \*45) Aethylester d. Benzylidenhydrazidoameisensäure. Sm. 135—136°. Hg, Ag (P. GUTMANN, Dissertat., Heidelberg 1903).

- $C_{10}H_{12}O_2N_2$  76) Methyläther d.  $\alpha$ -Acetyl-amido- $\alpha$ -Phenylimido- $\alpha$ -Oxymethan. Fl. (2HCl, PtCl<sub>4</sub>), Ag (C. 1904 [1] 1559).  
 77) Methyläther d.  $\alpha$ -Acetylphenylamido- $\alpha$ -Imido- $\alpha$ -Oxymethan. Sm. 102°. HCl (C. 1904 [1] 1560).  
 78) 3,6-Diacetyl-2,5-Dimethyl-1,4-Diazin. Sm. 98—99° (A. 325, 195 C. 1903 [1] 647).  
 79) Methylester d. Methylphenylhydrazonessigsäure. Sm. 158—160° (B. 37, 3592 C. 1904 [2] 1378).  
 80) Mono[4-Methylphenyl]diamid d. Malonsäure +  $\frac{1}{2}H_2O$ . Sm. 163 bis 164° u. ger. Zers. (Soc. 83, 38 C. 1903 [1] 441).
- $C_{10}H_{12}O_3N_4$  6) Amid d. 4-Methylphenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 173—174° (B. 37, 4178 C. 1904 [2] 1705).  
 7) Amid d. 2,4-Dimethylphenylnitrosohydrazonessigsäure (J. pr. [2] 67, 412 C. 1903 [1] 1347).
- $C_{10}H_{12}O_2Br_2$  \*11) 3-Methyläther d. 3,4-Dioxy-1-[ $\alpha\beta$ -Dibrompropyl]benzol. Sm. 95° (A. 329, 9 C. 1903 [2] 1434).
- $C_{10}H_{12}O_3S$  \*3)  $\alpha$ -Merkaptopropionbenzyläthersäure. Sm. 76,5° (H. 42, 356 C. 1904 [2] 979).  
 7)  $\beta$ -Merkaptopropionbenzyläthersäure. Sm. 81—81,5° (H. 42, 352 C. 1904 [2] 979).  
 8) 1,2,3,4-Tetrahydronaphtalin-5-Sulfinssäure. Zers. bei 103—105° (Soc. 85, 757 C. 1904 [2] 449).
- $C_{10}H_{12}O_3S_2$  3) Diäthyläther d. 2,5-Dimerkapto-1,4-Benzochinon. Sm. 159° (A. 336, 158 C. 1904 [2] 1300).
- $C_{10}H_{12}O_3N_2$  \*6) Methyläther d. syn-4-Oxy-1-[ $\alpha\beta$ -Dioximidopropyl]benzol. Sm. 121° (A. 332, 318 C. 1904 [2] 651).  
 \*7) Methyläther d. anti-4-Oxy-1-[ $\alpha\beta$ -Dioximidopropyl]benzol. Sm. 206° u. Zers. (B. 36, 3021 C. 1903 [2] 1002; A. 329, 268 C. 1904 [1] 32).  
 \*53) 5-Nitro-2,4-Dimethylphenylamid d. Essigsäure. Sm. 159° (G. 33 [2] 283 C. 1904 [1] 265).  
 \*75) 2-Amid d. Benzol-1-Carbonsäure-2-Amidoessigsäure-1-Methylester. Sm. 195° (D.R.P. 137846 C. 1903 [1] 108).  
 87) Nitrosit d.  $\delta$ -Phenyl- $\alpha$ -Buten. Zers. bei 110° (B. 36, 3001 C. 1903 [2] 949).  
 88) Acetyl-4-Amidophenylamidoessigsäure (D.R.P. 152012 C. 1904 [2] 70).  
 89) Methylester d. Phenylhydrazonoxysigmethyläthersäure. Sm. 123—124° (126°) (A. 306, 15; Soc. 85, 987 C. 1904 [2] 830).  
 90) Methylester d.  $\beta$ -Phenylureidoessigsäure. Sm. 143° (J. pr. [2] 70, 246 C. 1904 [2] 1463).  
 91) Aethylester d.  $\alpha$ -[2-Oxybenzyliden]hydrazin- $\beta$ -Carbonsäure. Sm. 127° (P. GUTMANN, Dissert., Heidelberg 1903).  
 92) Aethylester d.  $\alpha$ -Benzoylhydrazin- $\beta$ -Carbonsäure. Sm. 126° (P. GUTMANN, Dissert., Heidelberg 1903).  
 93) N-Acetat d.  $\beta$ -Phenylamido- $\alpha$ -Oximido- $\alpha$ -Oxyäthan. Sm. 107° (Soc. 81, 1574 C. 1903 [1] 158).  
 94) 3-Amid d. 3-Carboxylphenylamidoameisensäure. Sm. 159—160° (C. 1904 [2] 102).  
 95) Aethoxylamid d. Phenylloxaminsäure. Sm. 176° (Soc. 81, 1567 C. 1903 [1] 157).  
 96) Verbindung (aus Bernsteinsäureanhydrid u. 1,3-Diamidobenzol). Sm. 166° (183°) (A. 327, 39 C. 1903 [1] 1336).  
 97) Verbindung (aus Bernsteinsäureanhydrid u. 1,4-Diamidobenzol). Sm. 183° (A. 327, 39 C. 1903 [1] 1336).
- $C_{10}H_{12}O_3N_4$  3) Amid d. 2-Methoxylphenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 143° (B. 37, 4179 C. 1904 [2] 1705).  
 4) Acetylhydrazid-Phenylhydrazid d. Oxalsäure. Sm. 220—221° (B. 37, 2426 C. 1904 [2] 341).
- $C_{10}H_{12}O_3Br_2$  \*5) 3-Methyläther d. 5-Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]-benzol. Sm. 144° (A. 329, 18 C. 1903 [2] 1435).
- $C_{10}H_{12}O_3S$  6)  $\alpha$ -Merkapto- $\alpha$ -Oxypropion-S-Benzyläthersäure. Sm. 82° (B. 36, 299 C. 1903 [1] 499).

- $C_{10}H_{12}O_3S$  7) 1,2,3,4-Tetrahydronaphtalin-5-Sulfonsäure. Ba + 3 H<sub>2</sub>O (*Soc.* 85, 756 *C.* 1904 [2] 449).
- $C_{10}H_{12}O_4N_2$  \* 22) 1,4-Phenylendi[Amidoessigsäure]. Sm. 233—235° u. Zers. (D.R.P. 145062 *C.* 1903 [2] 1036).
- \* 43)  $\beta$ -[ $\beta$ -Phenylureido]- $\alpha$ -Oxypropionsäure. Sm. 180° (*B.* 37, 338 *C.* 1904 [1] 647).
- 45) Methylenäther d. 6-Nitro-2-Amido-3,4-Dioxy-1-Propylbenzol. Sm. 76,5° (*Ar.* 242, 91 *C.* 1904 [1] 1007).
- 46) 4-Methyläther d.  $\alpha$ -Oximido- $\beta$ -Nitro- $\alpha$ -[4-Oxyphenyl]propan. Sm. 87° (*A.* 329, 262 *C.* 1904 [1] 32).
- 47)  $\beta$ -Äthyläther d.  $\beta$ -Imido- $\alpha$ -Dioxy- $\alpha$ -[2-Nitrophenyl]äthan. HCl (*B.* 37, 949 *C.* 1904 [1] 1217).
- 48)  $\alpha\alpha$ -Di[5-Keto-3-Methyl-4,5-Dihydro-4-Isoxazolyl]äthan. Sm. 157° u. Zers. (*A.* 332, 20 *C.* 1904 [1] 1565).
- 49) Äthylester d. 3-Nitro-4-Methylamidobenzol-1-Carbonsäure. Sm. 101—102° (*B.* 37, 1030 *C.* 1904 [1] 1207).
- 50) Monoäthylester d. 3,6-Dimethyl-1,2-Diazin-4,5-Dicarbonsäure. Sm. 155—156°. K (*B.* 36, 508 *C.* 1903 [1] 654).
- 51) Amid d. Oxyessig-2-Amidophenyläthersäure-4-Carbonsäuremethylester. Sm. 178° (*A.* 325, 337 *C.* 1903 [1] 771).
- 52) Amid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure + H<sub>2</sub>O? Sm. 203—205° (221—223°) (*M.* 24, 388 *C.* 1903 [2] 493).
- $C_{10}H_{12}O_4N_4$  6) Äthylester d. 2,6-Diketo-3,7-Dimethylpurin-8-Carbonsäure. Sm. 300° (D.R.P. 153121 *C.* 1904 [2] 626).
- $C_{10}H_{12}O_4S$  13) Benzylidenacetonhydrosulfonsäure. Na, K, Ba (*B.* 37, 4043 *C.* 1904 [2] 1648).
- 14)  $\beta$ -[4-Methylphenyl]sulfonpropionsäure. Sm. 110—113° (*Am.* 31, 175 *C.* 1904 [1] 876).
- $C_{10}H_{12}O_5N_2$  \* 2) 3,5-Dinitro-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 116—117° (*A.* 333, 359 *C.* 1904 [2] 1116).
- $C_{10}H_{12}O_6N_4$  2)  $\beta$ -Acetyl- $\alpha\alpha'$ -Dimethylisocollitursäure. Sm. 193—194° (*A.* 333, 127 *C.* 1904 [2] 894).
- $C_{10}H_{12}O_6N_2$  \* 1) Diäthyläther d. 4,6-Dinitro-1,3-Dioxybenzol. Sm. 133° (130°) (*R.* 23, 123 *C.* 1904 [2] 206; *Am.* 32, 303 *C.* 1904 [2] 1385).
- \* 7) *p*-Dinitro-1-Isopropyl-*p*-Dihydrobenzol-4-Carbonsäure (*M.* 25, 465 *C.* 1904 [2] 333; *B.* 37, 2431 *C.* 1904 [2] 334).
- 8) Dimethyläther d.  $\beta$ -Nitro- $\alpha\alpha$ -Dioxy- $\alpha$ -[4-Nitrophenyl]äthan. Sm. 112,5°; Zers. oberh. 200° (*A.* 325, 17 *C.* 1903 [1] 287).
- 9)  $\delta\delta$ -Diimido- $\beta\eta$ -Diketooktan- $\gamma\zeta$ -Dicarbonsäure. Sm. 230° (*A.* 332, 141 *C.* 1904 [2] 191).
- 10) Äthylester d. Tetronsäureazoacetessigsäure. Sm. 128° (*A.* 325, 179 *C.* 1903 [1] 646).
- 11) 3-Äthylester-5-Glykolester d. 4-Methylpyrazol-3,5-Dicarbonsäure. Sm. 181° (*A.* 325, 180 *C.* 1903 [1] 646).
- $C_{10}H_{12}O_6N_4$  6) 2,4,6-Trinitro-5-Äthylamido-1,3-Dimethylbenzol. Sm. 122° (*R.* 21, 331 *C.* 1903 [1] 78).
- $C_{10}H_{12}NBr$  2) 8-Brom-5-Amido-1,2,3,4-Tetrahydronaphtalin. Sm. 42°. HCl (*Soc.* 85, 745 *C.* 1904 [2] 447).
- 3) 5-Brom-6-Amido-1,2,3,4-Tetrahydronaphtalin. Sm. 52,5° (*Soc.* 85, 731 *C.* 1904 [2] 116, 339).
- 4) 8-Brom-6-Amido-1,2,3,4-Tetrahydronaphtalin. Sm. 52° (*Soc.* 85, 731 *C.* 1904 [2] 116, 339).
- $C_{10}H_{12}Cl_2J_2$  2)  $\alpha\beta$ -Dichloräthyl-4-Äthylphenyljodoniumjodid. Zers. bei 69° (*A.* 327, 297 *C.* 1903 [2] 352).
- $C_{10}H_{12}Cl_3J$  2)  $\alpha\beta$ -Dichloräthyl-4-Äthylphenyljodoniumchlorid. Zers. bei 134°. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> + 2H<sub>2</sub>O (*A.* 327, 297 *C.* 1903 [2] 352).
- $C_{10}H_{13}ON$  \* 26) anti-2,4,6-Trimethylbenzaloxim. Sm. 124° (*B.* 36, 331 *C.* 1903 [1] 576).
- \* 27) syn-2,4,6-Trimethylbenzaloxim. Sm. 180—181° (*B.* 36, 330 *C.* 1903 [1] 576).
- \* 57) Äthylphenylamid d. Essigsäure. Sm. 55° (*B.* 35, 4188 *C.* 1903 [1] 143).
- \* 91) 2-Methylbenzimidoäthyläther. Sd. 106—118°<sub>20-25</sub> (*Soc.* 83, 770 *C.* 1903 [2] 200, 437).

- $C_{10}H_{13}ON$  \*102) Propylamid d. Benzolcarbonsäure. Sm.  $83^{\circ}$  (*C. r.* 135, 973 *C.* 1903 [1] 232).
- 103) Methyläther d.  $\alpha$ -Aethylimido- $\alpha$ -Oxy- $\alpha$ -Phenylmethan. Sd. 209 bis  $212^{\circ}_{760}$  (*Soc.* 83, 323 *C.* 1903 [1] 580, 876).
- 104) Aethyläther d.  $\alpha$ -Methylimido- $\alpha$ -Oxy- $\alpha$ -Phenylmethan. Sd.  $215^{\circ}$  (*Soc.* 83, 325 *C.* 1903 [1] 581, 876).
- 105) isom. anti-4-Isopropylbenzaldoxim. Sm.  $35^{\circ}$  (*B.* 37, 3044 *C.* 1904 [2] 1215).
- 106) Aldehyd d. 6-Aethylamido-1-Methylbenzol-3-Carbonsäure. Sm.  $69,5^{\circ}$  (*B.* 37, 863 *C.* 1904 [1] 1207).
- 107) Aldehyd d. 4-Methyläthylamidobenzol-1-Carbonsäure. Sm.  $14^{\circ}$ ; Sd.  $180^{\circ}_{20}$  (*B.* 37, 862 *C.* 1904 [1] 1206).
- $C_{10}H_{13}ON_3$  \*6)  $\alpha$ -Semicarbazon- $\alpha$ -Phenylpropan. Sm. 178—179° (*A.* 325, 147 *C.* 1903 [1] 644).
- 11)  $\beta$ -Semicarbazon- $\alpha$ -Phenylpropan. Sm. 188—189° (*A.* 325, 146 *C.* 1903 [1] 644).
- 12)  $\alpha$ -Semicarbazon- $\beta$ -Phenylpropan. Sm. 156—157° (*C. r.* 137, 1261 *C.* 1904 [1] 445). — \*III, 41.
- 13) 1-Semicarbazonmethyl-4-Aethylbenzol. Sm.  $199^{\circ}$  (*C. r.* 136, 558 *C.* 1903 [1] 832).
- 14) Amid d. 2,4-Dimethylhydrazonessigsäure. Sm.  $184^{\circ}$  (*J. pr.* [2] 67, 410 *C.* 1903 [1] 1347).
- $C_{10}H_{13}OCl$  4)  $\gamma$ -Chlor- $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Methylpropan. Sd.  $155^{\circ}_{25}$  (*C. r.* 138, 768 *C.* 1904 [1] 1196).
- $C_{10}H_{13}OBr$  14) Bromumbellulon. Sd. 140—145°<sub>20</sub> (*Soc.* 85, 642 *C.* 1904 [1] 1607 *C.* 1904 [2] 330).
- $C_{10}H_{13}O_2N$  \*49)  $\gamma$ -Amido- $\gamma$ -Phenylbuttersäure. Sm.  $216^{\circ}$ . HCl (*B.* 36, 174 *C.* 1903 [1] 445).
- \*66) Inn. Anhydrid d. 4-Trimethylamidobenzol-1-Carbonsäure +  $H_2O$ . Sm.  $255^{\circ}$  (wasserfrei) (*B.* 37, 414 *C.* 1904 [1] 943).
- \*67) N-Anhydrid d. Dimethylphenylammoniumessigsäure +  $H_2O$ . Sm. 123—124°. HCl; (2HCl,  $PtCl_4$ ), Pikrat (*A.* 326, 326 *C.* 1903 [1] 1089; *B.* 37, 415 *C.* 1904 [1] 943; *B.* 37, 1860 *C.* 1904 [1] 1487).
- \*73) Methylester d. 4-Dimethylamidobenzol-1-Carbonsäure. Sm.  $102^{\circ}$  (*B.* 37, 415 *C.* 1904 [1] 943).
- \*81) Aethylester d. Methylphenylamidoameisensäure. Sd. 127—128°<sub>13</sub> (*B.* 36, 2477 *C.* 1903 [2] 559).
- \*124) Aethylester d. 2,6-Dimethylpyridin-3-Carbonsäure. Sd. 140—142°<sub>20</sub> (*B.* 36, 2857 *C.* 1903 [2] 1129).
- 136) Methylenäther d. 6-Amido-3,4-Dioxy-1-Propylbenzol. Sm.  $24^{\circ}$ ; Sd.  $156^{\circ}_{11,5}$ . HCl (*A. r.* 242, 89 *C.* 1904 [1] 1007).
- 137) 4-Methyläther d.  $\beta$ -Oximido- $\alpha$ -[4-Oxyphenyl]propan. Sm. 65—66°; Sd. 160—170°. HCl (*A.* 332, 322 *C.* 1904 [2] 651).
- 138) 2-Methyläther d.  $\alpha$ -Oximido- $\alpha$ -[2-Oxy-4-Methylphenyl]äthan. Sm.  $136^{\circ}$  (*C.* 1904 [1] 1597).
- 139) Oxim d. Rheosmin (*C.* 1903 [1] 883).
- 140) Inn. Anhydrid d. 2-Trimethylamidobenzol-1-Carbonsäure +  $\frac{1}{2}H_2O$  (Anthraxisäurebetain). Sm.  $224^{\circ}$  ( $227^{\circ}$  wasserfrei). (HCl,  $AuCl_3$ ), HJ +  $H_2O$  (*B.* 37, 413 *C.* 1904 [1] 943).
- 141) Methylester d.  $\alpha$ -Amido- $\beta$ -Phenylpropionsäure. Sd.  $141^{\circ}_{12}$ . HCl (*B.* 37, 1267 *C.* 1904 [1] 1334).
- 142) Methylester d. Methylphenylamidoessigsäure. Sd. 140—141°<sub>10</sub> (*B.* 37, 416 *C.* 1904 [1] 943).
- 143) Methylester d. 2-Dimethylamidobenzol-1-Carbonsäure. Sd. 160 bis  $161^{\circ}_{38}$ . HJ (*B.* 37, 408 *C.* 1904 [1] 942).
- 144) Acetat d. 4-Dimethylamido-1-Oxybenzol. Sm. 78—79° (*A.* 334, 309 *C.* 1904 [2] 986).
- 145) Methylamid d. 3-Oxybenzoläthyläther-1-Carbonsäure. Sm.  $64^{\circ}$  (*A.* 329, 70 *C.* 1903 [2] 1440).
- 146) Piperidid d. Furan-2-Carbonsäure. Sm.  $58^{\circ}$  (*B.* 37, 2953 *C.* 1904 [2] 993).
- $C_{10}H_{13}O_2N_3$  29) Aethyläther d.  $\alpha$ -Imido- $\beta$ -Phenylnitrosamido- $\alpha$ -Oxyäthan. Sm.  $98^{\circ}$  (*B.* 36, 4304 *C.* 1904 [1] 447).

- $C_{10}H_{15}O_2N_3$  30)  $\beta$ -[4-Nitrophenyl]hydrazonbutan. Sm. 128° (119,5—120°) (*R.* 22, 435 *C.* 1904 [1] 15; *B.* 37, 1793 *C.* 1904 [1] 1612).
- 31) Methyläther d.  $\alpha$ -Semicarbazon- $\alpha$ -[2-Oxyphenyl]äthan. Sm. 180 bis 182° (*B.* 36, 3589 *C.* 1903 [2] 1365).
- 32) Methyläther d.  $\alpha$ -Semicarbazon- $\alpha$ -[3-Oxyphenyl]äthan. Sm. 181 bis 183° (*B.* 36, 3591 *C.* 1903 [2] 1366).
- 33) Amid d.  $\alpha$ -[Methyl-4-Nitrosophenyl]amidopropionsäure. Sm. 159,5° (*B.* 36, 761 *C.* 1903 [1] 963).
- 34) Hydrazid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 105—107° (*J. pr.* [2] 70, 142 *C.* 1904 [2] 1394).
- $C_{10}H_{18}O_2Cl$  \*1) 6-Chlor-2,5-Dioxy-4-Isopropyl-1-Methylbenzol. Sm. 70° (*A.* 336, 27 *C.* 1904 [2] 1467).
- $C_{10}H_{18}O_3N$  63)  $\gamma$ -Keto- $\alpha$ -Oxy- $\alpha$ -[2-Hydroxylamidophenyl]butan. Sm. 78° (D.R.P. 89978). — \*III, 119.
- 64) Aethylamidomethyl-3,4-Dioxyphenylketon. Sm. 185° u. Zers. HCl (D.R.P. 152814 *C.* 1904 [2] 271; *B.* 37, 4153 *C.* 1904 [2] 1744).
- 65) Diäthyläther d. 2-Oximido-5-Oxy-1-Keto-1,2-Dihydrobenzol. Sm. 89,5—91,5° (*J. pr.* [2] 70, 323 *C.* 1904 [2] 1540).
- 66) Epinephrin +  $\frac{1}{2}H_2O$ . HCl, HBr,  $H_2SO_4$ , Pikrat (*H.* 28, 325; *B.* 36, 1839 *C.* 1903 [2] 303; *B.* 37, 368 *C.* 1904 [1] 677). — \*III, 667.
- 67) Methyldamascen-S. HCl +  $H_2O$  (*Ar.* 242, 313 *C.* 1904 [2] 457).
- 68)  $\beta$ -oder- $\gamma$ -Oxamido- $\gamma$ -Phenylbuttersäure. Sm. 108° (*B.* 36, 4316 *C.* 1904 [1] 449).
- 69)  $\alpha$ -Oxamido- $\beta$ -Phenylisobuttersäure (*B.* 36, 4314 *C.* 1904 [1] 449).
- 70) 6-Oxy-2-Methyl-5-Propylpyridin-6-Aethyläther-3-Carbonsäure: Sm. 300° u. Zers. (*G.* 33 [2] 166 *C.* 1903 [2] 1283).
- 71) Methyl ester d. 3-Dimethylamido-4-Oxybenzol-1-Carbonsäure. Sm. 59,5—60° (*A.* 325, 329 *C.* 1903 [1] 770).
- 72) Aethylester d. 2-Cyan-3-Keto-1-Methyl-R-Pentamethylen-2-Carbonsäure. Sm. 185° (*C.* 1903 [2] 1425).
- 73) Aethylester d. 2-Oxy-3-Methylphenylamidoameisensäure. Sm. 74—76° (*Am.* 32, 22 *C.* 1904 [2] 696).
- 74) Aethylester d. 6-Oxy-3-Methylphenylamidoameisensäure. Sm. 101° (*Am.* 32, 16 *C.* 1904 [2] 696).
- 75) Aethylester d. 2-Oxy-4-Methylphenylamidoameisensäure. Sm. 95° (*Am.* 32, 20 *C.* 1904 [2] 696).
- 76) Aethyl-6-Amido-2-Methylphenylester d. Kohlensäure. HCl, (2HCl,  $PtCl_4$ ) (*Am.* 31, 492 *C.* 1904 [2] 94; *Am.* 32, 21 *C.* 1904 [2] 696).
- 77) Aethyl-6-Amido-3-Methylphenylester d. Kohlensäure. HCl, (2HCl,  $PtCl_4$ ) (*Am.* 31, 490 *C.* 1904 [2] 94; *Am.* 32, 20 *C.* 1904 [2] 696).
- 78) Aethyl-2-Amido-4-Methylphenylester d. Kohlensäure. HCl, (2HCl,  $PtCl_4$ ) (*Am.* 31, 485 *C.* 1904 [2] 94; *Am.* 32, 18 *C.* 1904 [2] 696).
- 79) Monoacetat d. 2-[ $\beta\beta$ -Dioxyisopropyl]pyridin. Fl. (2HCl,  $PtCl_4$  +  $H_2O$ ) (*B.* 37, 741 *C.* 1904 [1] 1089).
- 80) Verbindung (aus Damasceninjodmethylat). Sm. 118—119° (*Ar.* 242, 319 *C.* 1904 [2] 457).
- $C_{10}H_{18}O_3N_3$  7) Methyläther d.  $\beta$ -[4-Nitrophenyl]hydrazon- $\alpha$ -Oxypropan. Sm. 110—111° (*G.* 33 [1] 322 *C.* 1903 [2] 281).
- 8) 5-Nitro-2-Oxy-1,2,3-Trimethyl-2,3-Dihydrobenzimidazol. Sm. 175° (*B.* 36, 3969 *C.* 1904 [1] 177).
- 9) *p*-Nitro-2-Oxy-1,3,5-Trimethyl-2,3-Dihydrobenzimidazol. Sm. 150° u. Zers. (*B.* 36, 3971 *C.* 1904 [1] 178).
- $C_{10}H_{18}O_3N_5$  C 47,8 — H 5,2 — O 19,1 — N 27,9 — M. G. 251.
- 1) 8-Acetylamido-2,6-Diketo-1,3,7-Trimethylpurin. Sm. 270° (D.R.P. 139960 *C.* 1903 [1] 859).
- $C_{10}H_{18}O_4N$  29) 4-Methyläther d. 6-Nitro-3,4-Dioxy-1-Propylbenzol. Sm. 52° (*Ar.* 242, 93 *C.* 1904 [1] 1007).
- 30) Dimethyläther d.  $\beta$ -Nitro- $\alpha\alpha$ -Dioxy- $\alpha$ -Phenyläthan. Sm. 55,5—56° (*A.* 325, 10 *C.* 1903 [1] 287).
- 31)  $\beta$ -Oxyäthylamidomethyl-3,4-Dioxyphenylketon. HCl (D.R.P. 152814 *C.* 1904 [2] 271).
- 32) 2,4,6-Trimethyläther d. 2,4,6-Trioxybenzol-1-Oximidomethylbenzol. Sm. 201—203° (*M.* 24, 868 *C.* 1904 [1] 368).

- $C_{10}H_{13}O_4N$  33) Aethylester d. 6-Amido-3,5-Dioxy-1-Methylbenzol-2-Carbonsäure. HCl (B. 37, 1419 C. 1904 [1] 1417).  
 34) Aethylester d.  $\alpha$ -[2-Furanoyl]amidopropionsäure. Sm. 71—72° (B. 37, 2958 C. 1904 [2] 993).
- $C_{10}H_{13}O_5N_3$  C 47,0 — H 5,1 — O 31,4 — N 16,5 — M. G. 255.  
 1) Aethyläther d. 3,5-Dinitro-4-Methylamido-2-Oxy-1-Methylbenzol. Sm. 160° (J. pr. [2] 67, 559 C. 1903 [2] 240).
- $C_{10}H_{13}O_5N_5$  C 42,4 — H 4,6 — O 28,3 — N 24,7 — M. G. 283.  
 1) Vernin (oder  $C_{16}H_{20}O_8N_8$ ) (H. 41, 462 C. 1904 [1] 1656).
- $C_{10}H_{13}O_5Cl$  2)  $\gamma$ -Lakton d.  $\zeta$ -Chlor- $\varepsilon$ -Oxy- $\beta$ -Ketohehexan- $\alpha\gamma$ -Dicarbonsäure- $\alpha$ -Aethylester. Fl. Cu (C. r. 136, 435 C. 1903 [1] 698).  
 C 40,1 — H 4,3 — O 32,1 — N 23,4 — M. G. 299.
- $C_{10}H_{13}O_6N_5$  1) 2,4,6-Trinitro-1,3-Di-[Aethylamido]benzol. Sm. 144° (R. 21, 325 C. 1903 [1] 80).  
 2) 3,5-Dinitro-4-Methylnitramido-2-Dimethylamido-1-Methylbenzol. Sm. 126—127° (J. pr. [2] 67, 527 C. 1903 [2] 239).
- $C_{10}H_{13}NS$  7) Phenylamid d. Thiobuttersäure. Sm. 32—33° (B. 36, 588 C. 1903 [1] 830).
- $C_{10}H_{13}NS_2$  8) Methyllester d. Aethylphenylamidodithioameisensäure. Sm. 52 bis 53° (J. pr. [2] 67, 287 C. 1903 [1] 1306).  
 9) Aethylester d. Methylphenylamidodithioameisensäure. Sm. 94 bis 95,5° (J. pr. [2] 67, 286 C. 1903 [1] 1306).
- $C_{10}H_{13}N_2J$  5) Jodnikotin (C. 1903 [2] 123).
- $C_{10}H_{13}N_3S_2$  2) Aethyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -Imido- $\alpha$ -Merkaptomethan. Sm. 114° (Am. 30, 173 C. 1903 [2] 871).
- $C_{10}H_{13}N_3S_3$  1)  $\beta$ -Methyl- $\beta$ -[Methylmerkaptophenylimido]methylhydrazidodithioameisensäure (B. 37, 2323 C. 1904 [2] 312).
- $C_{10}H_{14}ON_2$  \*5) 4-Nitroso-1-Diäthylamidobenzol (C. 1904 [2] 319).  
 \*11) 4-Acetylamido-1-Dimethylamidobenzol. Sm. 129° (A. 334, 311 C. 1904 [2] 986).  
 \*60) Amid d.  $\alpha$ -Methylphenylamidopropionsäure. Sm. 47,5° (B. 36, 760 C. 1903 [1] 962).  
 62) 2-Methylnitrosamido-1,3,5-Trimethylbenzol. Fl. (A. 327, 110 C. 1903 [1] 1213).  
 63) Aethyläther d.  $\alpha$ -Imido- $\beta$ -Phenylamido- $\alpha$ -Oxyäthan. Sd. 134°<sub>120</sub>. 2HCl (B. 36, 4303 C. 1904 [1] 447).  
 64) 4-Aethylamido-3-Methylbenzaldoxim. Sm. 82° (B. 37, 864 C. 1904 [1] 1207).  
 65) Methyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Sd. 186°<sub>24</sub> u. Zers. (G. 33 [1] 320 C. 1903 [2] 281).  
 66) Amid d. Aethylphenylamidoessigsäure. Sm. 114° (D.R.P. 142559 C. 1903 [2] 81).
- $C_{10}H_{14}NBr_2$  \*2)  $\alpha\beta$ -Dibromcampher. Sm. 112—114° (B. 37, 2078 C. 1904 [2] 18).  
 5) Dibromdihydroumbellulon. Fl. (Soc. 85, 641 C. 1904 [1] 1607 C. 1904 [2] 329).  
 6) isom. Dibromdihydroumbellulon. Sm. 119—119,5° (Soc. 85, 643 C. 1904 [1] 1607 C. 1904 [2] 330).
- $C_{10}H_{14}OJ_2$  1) o,o-Dijodcampher. Sm. 108—109° (B. 37, 2165, 2182 C. 1904 [2] 222).
- $C_{10}H_{14}O_2N_2$  \*34) Aethylester d.  $\alpha$ -Phenylhydrazidoessigsäure. HCl, Oxalat (B. 36, 3883 C. 1904 [1] 27).  
 \*35) Aethylester d.  $\beta$ -Phenylhydrazidoessigsäure. Oxalat (B. 36, 3881 C. 1904 [1] 26).  
 52) Methylenäther d. 2,6-Diamido-3,4-Dioxy-1-Propylbenzol. Sm. 72°. HCl (Ar. 242, 91 C. 1904 [1] 1007).  
 53) Peroxyd d. Campherdioxim. Sm. 144,5° (Soc. 83, 525 C. 1903 [1] 1136, 1353).  
 54) 3,6-Di[Methylamido]-2,5-Dimethyl-1,4-Benzochinon. Sm. 227° (B. 37, 2388 C. 1904 [2] 308).  
 55) Amid d. 2-Oxyphenylamidoessigäthyläthersäure. Sm. 161—162° (Bl. [3] 29, 967 C. 1903 [2] 1118).  
 56) Amid d. 4-Oxyphenylamidoessigäthyläthersäure. Sm. 145—146° (Bl. [3] 29, 967 C. 1903 [2] 1118).

- $C_{10}H_{14}O_2N_4$  10) Diamid d. 1,3-Phenylendi[Amidoessigsäure]. Sm. 196—197° (*Bl.* [3] 29, 967 *C.* 1903 [2] 1118).  
 11) Diamid d. 1,4-Phenylendi[Amidoessigsäure]. Sm. 250—252° u. Zers. (*Bl.* [3] 29, 967 *C.* 1903 [2] 1118).
- $C_{10}H_{14}O_2Br_4$  1) Laktone d.  $\alpha\beta\zeta\eta$ -Tetrabrom- $\delta$ -Oxyheptan- $\delta$ -[Aethyl- $\beta$ -Carbonsäure]. Sm. 125—127° (*C.* 1904 [1] 1330).
- $C_{10}H_{14}O_2S_2$  1) 2,5-Diäthyläther d. 2,5-Dimerekapto-1,4-Dioxybenzol. Sm. 49 bis 50° (*A.* 336, 158 *C.* 1904 [2] 1300).
- $C_{10}H_{14}O_2N_2$  7) Dimethyläther d. 2-Acetylamido-5-Amido-1,4-Dioxybenzol (D.R.P. 139286 *C.* 1903 [1] 679).  
 8) Aethylester d. 3-Acetyl-1,4-Dimethylpyrazol-5-Carbonsäure. Sm. 80—81° (*B.* 36, 1130 *C.* 1903 [1] 1138).
- $C_{10}H_{14}O_3S$  \*25) 1,2,3,5-Tetramethylbenzol-4-Sulfonsäure. Sm. 79—80° (*B.* 37, 1717 *C.* 1904 [1] 1489).
- $C_{10}H_{14}O_4N_2$  5)  $\alpha$ -Cyan- $\alpha$ -Oxyessig-[ $\beta$ -Cyan- $\alpha$ -Aethoxylbutyl]äthersäure. Sm. 153° u. Zers. (*C.* 1904 [1] 159).  
 6) Aethylester d.  $\alpha$ -Cyan- $\alpha$ -Oxyessig-[ $\beta$ -Cyan- $\alpha$ -Aethoxyläthyl]äthersäure. Sm. 53°; Sd. 235°<sub>30</sub> u. Zers. (*C.* 1904 [1] 159).  
 7) Monoäthylester d. 3,6-Dimethyl-4,5-Dihydro-1,2-Diazin-4,5-Dicarbonsäure. Sm. 205—207° K (*B.* 35, 4313 *C.* 1903 [1] 336; *B.* 36, 502 *C.* 1903 [1] 654).  
 8) Verbindung (aus 1-Nitrocamphen). Sm. 123° (*Soc.* 85, 327 *C.* 1904 [1] 807, 1440).
- $C_{10}H_{14}O_4N_4$  3) 3,5-Dinitro-2-Dimethylamido-4-Methylamido-1-Methylbenzol. Sm. 115° (*J. pr.* [2] 67, 565 *C.* 1903 [2] 241).  
 4) Dihydrazid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 215° (*M.* 24, 379 *C.* 1903 [2] 493).
- $C_{10}H_{14}O_4Br_4$  4) Tetrabromid d. Säure  $C_{10}H_{14}O_4$ . Sm. 90° (*C.* 1901 [1] 53). — \*II, 1026.
- $C_{10}H_{14}O_4S$  \*7) 3-Oxy-4-Isopropyl-1-Methylbenzol-6-Sulfonsäure. Salze siehe (*A.* 328, 141 *C.* 1903 [2] 991).  
 17) 4-Oxy-1-Aethylbenzoldiäthyläther- $\beta$ -Sulfonsäure. Sm. 82—84° (*B.* 36, 3594 *C.* 1903 [2] 1366).
- $C_{10}H_{14}O_4S_2$  3)  $\alpha$ -Aethylsulfon- $\alpha$ -Phenylsulfonäthan. Sm. 97—99° (*B.* 36, 303 *C.* 1903 [1] 500).  
 4)  $\alpha$ -Aethylsulfon- $\alpha$ -Benzylsulfonmethan. Sm. 172—174° (*B.* 36, 300 *C.* 1903 [1] 500).
- $C_{10}H_{14}O_5N_2$  4) Verbindung (aus 1-Nitrocamphen). Sm. 85—86°.  $NH_4$ , Cu, Ag (*Soc.* 85, 330 *C.* 1904 [1] 807, 1440).
- $C_{10}H_{14}O_6S$  1) Tetramethylester d. Dimethylsulfid- $\alpha\alpha\beta\beta$ -Tetracarbonsäure. Sm. 122° (*B.* 36, 3724 *C.* 1903 [2] 1416).
- $C_{10}H_{14}O_6S_3$  1) Tetramethylester d. Trithiodimalonsäure. Sm. 167° (*B.* 36, 3722 *C.* 1903 [2] 1416).
- $C_{10}H_{14}N_2S$  13) Methyläther d.  $\alpha$ -Imido- $\alpha$ -[Methyl-4-Methylphenyl]amido- $\alpha$ -Merkaptomethan. Sm. 190—191° (*Ann.* 30, 175 *C.* 1903 [2] 872).
- $C_{10}H_{15}ON$  \*30) Pseudoephedrin (Isephedrin). Sm. 117°.  $HCl$ , ( $HCl$ ,  $AuCl_3$ ) (*Ar.* 242, 380 *C.* 1904 [2] 508).  
 \*40) Ephedrin (*Ar.* 242, 380 *C.* 1904 [2] 508).
- $C_{10}H_{15}ON_3$  8)  $\alpha$ -Amido- $\beta$ -Aethyl- $\alpha$ -Benzylharnstoff. Fl. (*B.* 37, 2325 *C.* 1904 [2] 312).  
 9)  $\beta$ -Nitroso- $\alpha\beta$ -Diäthyl- $\alpha$ -Phenylhydrazin. Fl. (*C.* 1903 [1] 1128; *B.* 35, 4187 *C.* 1903 [1] 143).  
 10) Amid d. 4-Dimethylamidophenylamidoessigsäure. Sm. 159—160° (*Bl.* [3] 29, 968 *C.* 1903 [2] 1118).
- $C_{10}H_{15}OCl$  \*2)  $\alpha$ -Chlorcampher. Sm. 92° (*C.* 1903 [2] 373).  
 11) Chlorid d. Pulegensäure (*A.* 327, 128 *C.* 1903 [1] 1412).
- $C_{10}H_{15}OBr$  \*2)  $\alpha$ -Bromcampher. Sm. 76° (*B.* 36, 668 *C.* 1903 [1] 771).  
 11)  $l$ - $\alpha$ -Bromcampher. Sm. 76° (*Soc.* 79, 80). — \*III, 371.  
 12) Bromdihydroumbellulon. Sm. 58—59° (*Soc.* 85, 644 *C.* 1904 [1] 1608; *C.* 1904 [2] 330).
- $C_{10}H_{15}OJ$  \*1)  $\alpha$ -Jodcampher. Sm. 42—43° (*B.* 37, 2163, 2182 *C.* 1904 [2] 222).
- $C_{10}H_{15}O_2N$  \*4) Nitro- $\alpha$ -Phellandren. Sd. 130—134°<sub>11</sub> (*A.* 336, 30 *C.* 1904 [2] 1468).  
 \*5) Nitropinen (*A.* 336, 7 *C.* 1904 [2] 1466).  
 \*6) Oximidocampher. 2 + 3  $HgNO_3$ , 2 +  $AgNO_3$  (*C. r.* 136, 1223 *C.* 1903 [2] 116; *C.* 1903 [2] 878; *Soc.* 85, 902 *C.* 1904 [2] 596).

- $C_{10}H_{15}O_2N$  \*21) Imid d. Camphersäure. Sm. 248—249° (*Ph. Ch.* 42, 703 *C.* 1903 [1] 757; *A.* 328, 342 *C.* 1903 [2] 1124).
- 32) Nitro- $\beta$ -Phellandren. Fl. (*G.* 16, 227; *A.* 336, 44 *C.* 1904 [2] 1468). — III, 530.
- 33) isom. Oximidocampher. Sm. 114° (*Soc.* 83, 534 *C.* 1903 [1] 1136, 1353; *Soc.* 85, 904 *C.* 1904 [2] 597).
- 34) Aethylester d. 1,2,5-Trimethylpyrrol-3-Carbonsäure. Sm. 48°; Sd. 282—283°<sub>748</sub> (*C.* 1903 [2] 1281).
- $C_{10}H_{15}O_2Br$  35) Imid d. i-Camphersäure. Sm. 249° (*Am.* 28, 484 *C.* 1903 [1] 329).
- 9) 2,6-Diketo-4-[ $\alpha$ -Bromisopropyl]-1-Methylhexahydrobenzol. Sm. 135° (*A.* 330, 271 *C.* 1904 [1] 948).
- $C_{10}H_{15}O_2J$  1)  $\delta$ -Jod- $\alpha$ -Heptadien- $\delta$ -[Aethyl- $\beta$ -Carbonsäure] ( $\gamma$ -Jod- $\gamma\gamma$ -Diallylbuttersäure). Fl. (*C.* 1904 [1] 1330).
- $C_{10}H_{15}O_3N$  28) tert. Nitrofenchon. Sm. 96,5—97,5° (*C.* 1904 [1] 282).
- 29) sec. Nitrofenchon. Sm. 86—87° (*C.* 1904 [1] 282).
- 30) Nitropulegon. Sm. 123° (*C.* 1904 [1] 282).
- 31) 5-Oxy-5-Cyan-1,3-Dimethylhexahydrobenzol-1-Carbonsäure + 2H<sub>2</sub>O? Sm. 202,5° (*B.* 37, 4063 *C.* 1904 [2] 1650).
- 32) Amid d. i-Camphersäure. Sm. 196° (*Am.* 28, 482 *C.* 1903 [1] 320).
- $C_{10}H_{15}O_3N_3$  4) 1-Amid d. 3,6-Dimethyl-1,4-Dihydro-1,2-Diazin-1,5-Dicarbonsäure-5-Aethylester. Sm. 230° (*A.* 331, 315 *C.* 1904 [2] 46).
- 5) Verbindung (aus Anemonin). Sm. 68—69° (*Ar.* 230, 204). — \*III, 455.
- $C_{10}H_{15}O_3N_5$  1) Aethylester d. 3-[ $\alpha$ -Semicarbazonyl]-4-Methylpyrazol-5-Carbonsäure. Sm. 220—2° (*Soc.* 85, 913 *C.* 1904 [2] 1138).
- $C_{10}H_{15}O_4P$  5)  $\alpha$ -Oxyisopropyl- $\alpha$ -Oxybenzylunterphosphorige Säure. Ag (*C.* 1904 [2] 1709).
- 6) Säure (aus Acetaldehyd). Sm. 192° (*C. r.* 138, 1708 *C.* 1904 [2] 423).
- 7) Säure (aus Aceton). Sm. 182° (*C. r.* 138, 1708 *C.* 1904 [2] 422).
- $C_{10}H_{15}O_5N_5$  8) C 42,1 — H 5,2 — O 28,1 — N 24,6 — M. G. 285.
- 1) Aethylester d. Diazoacetylidi[Amidoacetyl]amidoessigsäure. Sm. 159° u. Zers. (*B.* 37, 1295 *C.* 1904 [1] 1336).
- $C_{10}H_{15}O_5N_3$  C 43,9 — H 5,5 — O 35,2 — N 15,4 — M. G. 273.
- 1) 3,4,6-Trinitro-5-Methyl-2-Isopropyl-1,2,3,4-Tetrahydrobenzol. Sm. 136—137° (*A.* 313, 351; *A.* 336, 21 *C.* 1904 [2] 1467).
- 2) Nitrosat d. 1-Nitrocampfen. Sm. 217° u. Zers. (*Soc.* 85, 326 *C.* 1904 [1] 807, 1440).
- $C_{10}H_{15}O_7N$  2) Triäthylester d. Stickstoffdicarbonsäureketocarbonsäure (Dicarbo-oxäthylloxamäthan). Sd. 170,5—171,5°<sub>11</sub> (*B.* 37, 3679 *C.* 1904 [2] 1495).
- $C_{10}H_{15}ON_4$  2) Nitril d. 5-Semicarbazonyl-1,3-Dimethylhexahydrobenzol-1-Carbonsäure. Sm. 200—201° (*B.* 37, 4062 *C.* 1904 [2] 1650).
- $C_{10}H_{15}OBr_2$  10) Dibromid d. Dihydrocarboxyd. Sm. 55° (*B.* 36, 766 *C.* 1903 [1] 836).
- 11) Menthonondibromid. Sm. 36° (*C.* 1903 [2] 1373).
- $C_{10}H_{15}OS$  1)  $\beta$ -Merkaptocampher. Sm. 66°. Ph, HgCl (*Soc.* 83, 479 *C.* 1903 [1] 923, 1137).
- $C_{10}H_{15}O_2N_2$  \*11)  $\beta$ -[3,5-Dioximido-4-Methylhexahydrophenyl]propen. Sm. 188° (*A.* 330, 274 *C.* 1904 [1] 948).
- 14)  $\alpha$ -d-Campherdioxim. Sm. 201° (181—182° u. Zers.) (*B.* 26, 243; *G.* 30 [2] 297; *Soc.* 83, 519 *C.* 1903 [1] 1136, 1352). — III, 500; \*III, 367.
- 15)  $\beta$ -d-Campherdioxim. Sm. 248° (220—221° u. Zers.) (*B.* 26, 243; *G.* 30 [2] 298; *Soc.* 83, 519 *C.* 1903 [1] 1136, 1352). — III, 500; \*III, 367.
- 16)  $\gamma$ -d-Campherdioxim. Sm. 138° (131—132°) (*B.* 26, 244; *Soc.* 83, 519 *C.* 1903 [1] 1136, 1352; *Soc.* 85, 913 *C.* 1904 [2] 598). — III, 500; \*III, 367.
- 17)  $\delta$ -d-Campherdioxim. Sm. 199° (*Soc.* 83, 520 *C.* 1903 [1] 1136, 1353). — \*III, 367.
- 18) r-Camphenylnitramin (r-Nitrocampferimin). Sm. 28° (*C. r.* 136, 1143 *C.* 1903 [1] 1410).
- 19) Pernitrosoderivat (aus Thujonoxim). Fl. (*R. A. L.* [5] 9 [1] 211). — \*III, 385.
- 20) 2,4,6-Triketo-5,5-Dipropylhexahydro-1,3-Diazin (Dipropylmalonylharnstoff) (*C.* 1903 [1] 1155).
- 21) Skatosin. 3HCl (*C.* 1903 [1] 411).

- $C_{10}H_{16}O_2N_2$  22) Methylester d. 3,4-Dimethyl-5-Propylisopyrazol-4-Carbonsäure. Sd. 156—158°<sub>14</sub> (Bl. [3] 27, 1104 C. 1903 [1] 227).
- 23) Verbindung (aus d. Verbindung  $C_{24}H_{24}O_4N_2$ ). Sm. noch nicht bei 260° (Soc. 85, 911 C. 1904 [2] 598).
- $C_{10}H_{16}O_4N_4$  2) 5-Nitro-3-Amido-2-Dimethylamido-4-Methylamido-1-Methylbenzol. Sm. 61,5—62° (J. pr. [2] 67, 568 C. 1903 [2] 241).
- $C_{10}H_{16}O_2N_8$  C 42,8 — H 5,7 — O 11,4 — N 40,0 — M. G. 280.
- 1) Porphyrindin + 2H<sub>2</sub>O. Sm. 190° u. Zers. wasserfrei (B. 36, 1301 C. 1903 [1] 1256).
- $C_{10}H_{16}O_2Cl_2$  2) Chlorid d.  $\beta$ -Methylheptan- $\gamma$ -Dicarbonsäure. Sd. 247—248°<sub>25</sub> (C. r. 136, 458 C. 1903 [1] 696).
- $C_{10}H_{16}O_2Br_2$  5) Methylester d. Dibromdihydro- $\beta$ -Campholytsäure. Fl. (Soc. 83, 860 C. 1903 [2] 573).
- $C_{10}H_{16}O_2Br_4$  1)  $\alpha\beta\zeta\eta$ -Tetrabromheptan- $\delta$ -[Aethyl- $\beta$ -Carbonsäure] (C. 1904 [1] 1330).
- $C_{10}H_{16}O_8N_2$  \*3) d-Phellandrennitrit (B. 36, 1754 C. 1903 [2] 118).
- 4)  $\alpha$ -Nitrit d. d- $\alpha$ -Phellandren. Sm. 112—113° (A. 336, 15 C. 1904 [2] 1466).
- 10)  $\beta$ -Nitrit d. d- $\alpha$ -Phellandren. Sm. 105° (A. 336, 15 C. 1904 [2] 1467).
- 11)  $\alpha$ -Nitrit d. l- $\alpha$ -Phellandren. Sm. 112—113° (A. 336, 15 C. 1904 [2] 1466).
- 12)  $\beta$ -Nitrit d. l- $\alpha$ -Phellandren. Sm. 105° (A. 336, 15 C. 1904 [2] 1467).
- 13)  $\alpha$ -Nitrit d.  $\beta$ -Phellandren. Sm. 102° (G. 16, 226; A. 336, 44 C. 1904 [2] 1468). — III, 530.
- 14)  $\beta$ -Nitrit d.  $\beta$ -Phellandren. Sm. 97—98° (G. 16, 226; A. 336, 44 C. 1904 [2] 1468). — III, 530.
- 15) Pulegonnitrosit. Sm. 68—69° (C. r. 137, 494 C. 1903 [2] 1003).
- 16) 2,4,6-Triketo-5,5-Dipropylhexahydro-1,3-Diazin. Sm. 145° (146°). Na (D.R.P. 146496 C. 1903 [2] 1483; D.R.P. 146949 C. 1904 [1] 68; A. 335, 344 C. 1904 [2] 1381).
- $C_{10}H_{16}O_4Br_2$  \*7) Diäthylester d.  $\alpha\delta$ -Dibrombutan- $\alpha\alpha$ -Dicarbonsäure. Sd. 176 bis 177,5°<sub>15</sub> (A. 326, 100 C. 1903 [1] 842).
- $C_{10}H_{16}O_4S$  4) Carvonhydrosulfonsäure. Na, Ba (Bl. [3] 23, 280; B. 37, 4042 C. 1904 [2] 1647).
- 5) l-Camphersulfonsäure. NH<sub>4</sub> (Soc. 79, 80). — \*III, 371.
- $C_{10}H_{16}O_5N_2$  2) Verbindung (aus Pulegon). Sm. 84—86° (C. 1904 [1] 282).
- 3) isom. Verbindung (aus Pulegon). Sm. 64—72° (C. 1904 [1] 282).
- 4) isom. Verbindung (aus Pulegon). Sm. 96—98° (C. 1904 [1] 282).
- $C_{10}H_{16}O_6S$  \*2) Sulfocampholencarbonsäure. NH<sub>4</sub>, K, K<sub>2</sub>, Ca, Ba, Mg (C. 1903 [2] 38; Soc. 83, 1102 C. 1903 [2] 793).
- $C_{10}H_{16}NCl$  6)  $\beta$ -Chlorcampherimin. Zers. bei 200° (C. 1903 [2] 373).
- $C_{10}H_{16}NJ_9$  1) Dimethyläthylphenylammoniumnonajodid. Sm. 29° (J. pr. [2] 67, 351 C. 1903 [1] 1297).
- $C_{10}H_{17}ON$  \*13) Oxim d. d-Campher. + 2HgNO<sub>3</sub>, 2 + AgNO<sub>3</sub> (C. 1903 [2] 878).
- \*21) r-4-Oximido-2-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 92—93° (A. 336, 38 C. 1904 [2] 1468).
- \*46) Trimethyl-4-Methylphenylammoniumhydroxyd. Methylsulfat (A. 327, 111 C. 1903 [1] 1213).
- \*50) Amid d. r- $\alpha$ -Campholensäure. Sm. 122° (C. r. 138, 696 C. 1904 [1] 1087).
- \*55) Amid d. Pulegensäure. Sm. 121—122° (A. 327, 128 C. 1903 [1] 1412).
- \*68) d-4-Oximido-2-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 75° (A. 336, 38 C. 1904 [2] 1468).
- \*69) Oximidomenthen. Sm. 62—62,5° (C. 1904 [1] 1347).
- 78) Trimethyl-2-Methylphenylammoniumhydroxyd. Methylsulfat (A. 327, 111 C. 1903 [1] 1213).
- 79) 3-Oximido-5-Isopropyl-2-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 63—66° (B. 28, 1588). — \*III, 385.
- 80) 1-4-Oximido-2-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 75—76° (A. 336, 37 C. 1904 [2] 1468).
- 81)  $\alpha$ -Anhydropulegonhydroxylamin. Sd. 91°. Pikrat (B. 37, 951 C. 1904 [1] 1087; B. 37, 2282 C. 1904 [2] 441; B. 37, 1341 C. 1904 [1] 1350; B. 37, 2428 C. 1904 [2] 442).

- $C_{10}H_{17}ON$  82) Oxim d. Calaminthion. Sm. 88—89° HCl (*C. r.* 136, 388 *C.* 1903 [1] 714).  
 83) Oxim d. synth. Pulegon. Sd. 145°<sub>15</sub> (*A.* 300, 270). — \*III, 384.  
 84) Oxim d. Keton  $C_{10}H_{16}O$ . Sm. 96—98° (*C.* 1898 [1] 572). — \*III, 386.  
 85) Oxim d. Keton  $C_{10}H_{16}O$  (aus Terpinennitrosit). Sm. 83—84° (*C.* 1898 [1] 572). — \*III, 386.  
 86) 5-Keto-1,2,2-Trimethyl-4-Isopropylidentetrahydropyrrol. Sd. 127 bis 128°<sub>15</sub> (*B.* 36, 3370 *C.* 1903 [2] 1187).  
 87) Amid d. 1,1,3-Trimethyl-1,2,3,4-Tetrahydrobenzol-5-Carbonsäure? Nadeln; Sd. 168°<sub>11</sub> (D.R.P. 141699 *C.* 1903 [1] 1245).
- $C_{10}H_{17}ON_3$  \*11) Semicarbazon d. Pulegenon. Sm. 183—184° (*A.* 327, 134 *C.* 1903 [1] 1412).  
 14)  $\alpha$ -Semicarbazon- $\beta$ -Nonin. Sm. 78—79° (*C. r.* 138, 1341 *C.* 1904 [2] 187).  
 15) 2-Semicarbazon-1-Methyl-3-Isopropyliden-R-Pentamethylen. Sm. 197° (*A.* 331, 326 *C.* 1904 [1] 1567).  
 16) Semicarbazon d. Pinophoron. Sm. 157—158° (*B.* 37, 240 *C.* 1904 [1] 726).
- $C_{10}H_{17}OCl$  5) Dihydrocarvonhydrochlorid. Sd. 155,5—157°<sub>15</sub> (*J. pr.* [2] 56, 256). — \*III, 375.
- $C_{10}H_{17}OBr$  1) 3-Keto-4-[ $\alpha$ -Bromisopropyl]-1-Methylhexahydrobenzol. Sm. 40,5° (*A.* 262, 21; *B.* 32, 3368). — \*III, 383.  
 2)  $\alpha$ -Brommenthon. Sd. 102—108°<sub>15-16</sub> (*B.* 37, 2078 *C.* 1904 [2] 18).  
 3) Pulegonhydrobromid. Sm. 40—41° (*C.* 1904 [2] 1045).
- $C_{10}H_{17}O_2N$  35) sec. i-Nitrodihydrocamphen. Sm. 125—129° (*C.* 1903 [1] 512).  
 36)  $\theta$ -Oximido- $\theta$ -Oxy- $\beta$ - $\zeta$ -Dimethyl- $\beta$ - $\zeta$ -Oktadien (Geranylhydroxamsäure). Fl. Cu (*G.* 34 [2] 73 *C.* 1904 [2] 734).  
 37)  $\alpha$ -Cyanoktan- $\alpha$ -Carbonsäure. Sm. 141° (*C.* 1904 [1] 880).  
 C 56,9 — H 8,0 — O 15,2 — N 19,9 — M. G. 211.
- $C_{10}H_{17}O_2N_3$  1) 2-Imido-4,6-Diketo-5,5-Dipropylhexahydro-1,3-Diazin.  $HNO_3$  (*A.* 335, 353 *C.* 1904 [2] 1381).
- $C_{10}H_{17}O_2Cl$  7) r-Pinolglykolchlorhydrin. Sm. 105—107° (*B.* 29, 888). — \*III, 392.  
 8) Aethylester d.  $\beta$ -Chlor- $\alpha$ -Hepten- $\alpha$ -Carbonsäure. Sd. 123—128°<sub>18</sub> (*Bl.* [3] 29, 677 *C.* 1903 [2] 488).
- $C_{10}H_{17}O_3N$  \*3)  $\alpha$ -Campheraminsäure.  $NH_4$  (*Am.* 32, 287 *C.* 1904 [2] 1222).  
 \*4)  $\beta$ -Campheraminsäure. Na (*Am.* 32, 287 *C.* 1904 [2] 1222).  
 32) i-Campheraminsäure. Sm. 198° (*Am.* 28, 485 *C.* 1903 [1] 329).  
 33) Methylester d. r-Ecgonin. Sm. 125—126° (*A.* 326, 68 *C.* 1903 [1] 841).
- $C_{10}H_{17}O_3N_3$  6) 5-Semicarbazon-1,3-Dimethylhexahydrobenzol-1-Carbonsäure. Sm. 203—205° (*B.* 37, 4072 *C.* 1904 [2] 1652).
- $C_{10}H_{17}O_3P$  3) Verbindung (aus Terpeninöl) (*C.* 1904 [2] 654).
- $C_{10}H_{17}O_4N_3$  2) 2,5-Diketo-1,4,4-Trimethyltetrahydroimidazol-3- $\alpha$ -Amidoisobuttersäure. Sm. 169° (*C.* 1904 [2] 1029).
- $C_{10}H_{17}O_4Cl_5$  1) Di[ $\beta$ -Dichlor- $\alpha$ -Aethoxyäthyläther] d.  $\beta$ -Chlor- $\alpha$ -Dioxyäthan. Sm. 82—84° (*G.* 33 [2] 407 *C.* 1904 [1] 922).
- $C_{10}H_{17}O_4Br$  \*5) Diäthylester d.  $\delta$ -Brombutan- $\alpha$ -Dicarbonsäure. Sd. 153—154° (*A.* 326, 99 *C.* 1903 [1] 842).
- $C_{10}H_{17}O_5N$  3) Verbindung (aus Dimethylamin u. 3,4,5-Trioxybenzol-1-Carbonsäure-äthylester). Sm. 79° (D.R.P. 141101 *C.* 1903 [1] 1058).
- $C_{10}H_{17}O_5N_3$  \*1)  $\alpha$ -Antipepton ( $\alpha$ -Trypsinfibrinpepton) (*H.* 38, 258, 269 *C.* 1903 [2] 210).  
 2)  $\delta$ -Semicarbazonheptan- $\alpha$ - $\eta$ -Dicarbonsäure. Sm. 176—177° (*B.* 37, 3820 *C.* 1904 [2] 1606).  
 3) Diäthylester d.  $\beta$ -Semicarbazonpropion- $\alpha$ - $\gamma$ -Dicarbonsäure. Sm. 94—95° (*Bl.* [3] 31, 12 *C.* 1904 [2] 1334).
- $C_{10}H_{17}O_6N$  4) Phaseolunatin. Sm. 141° (*C.* 1903 [2] 1334).  
 4) Triäthylester d. Amidoessigsäure-N-Dicarbonsäure. Sm. 36,5°; Sd. 152—153°<sub>10</sub> (*B.* 37, 1 *C.* 1904 [2] 1495).
- $C_{10}H_{17}O_6N_3$  C 43,6 — H 6,2 — O 34,9 — N 15,3 — M. G. 275.  
 1)  $\alpha$ -Carbäthoxyamidopropionylamidoacetyl-amidoessigsäure. Sm. 161 bis 162° (*B.* 36, 2988 *C.* 1903 [2] 1112).  
 2) Aethylester d. Oxyacetyl[Amidoacetyl]amidoessigsäure (*B.* 37, 1297 *C.* 1904 [1] 1336).  
 C 39,6 — H 5,6 — O 31,7 — N 23,1 — M. G. 303.
- $C_{10}H_{17}O_6N_5$  1) Tetra[Amidoacetyl]amidoessigsäure (Tetraglycylglycin). Zers. oberh. 246° (*B.* 37, 2507 *C.* 1904 [2] 427).

- $C_{10}H_{17}O_7N$  2) Nitrat d. 1- $\alpha$ -Oxyäthan- $\alpha$ - $\beta$ -Dicarbonsäuredipropylester. Fl. (B. 35, 4365 C. 1903 [1] 321).  
 $C_{10}H_{17}O_8N$  C 43,0 — H 6,1 — O 45,9 — N 5,0 — M. G. 279.  
 1) Dipropylester d. Nitroweinsäure. Fl. (B. 35, 4367 C. 1903 [1] 321; B. 36, 780 C. 1903 [1] 826).  
 $C_{10}H_{17}N_2Br$  2) Bromäthylat d. s-Aethylphenylhydrazin (C. r. 137, 330 C. 1903 [2] 716; Bl. [3] 29, 969 C. 1903 [2] 1115).  
 $C_{10}H_{17}N_2J$  \*2) Jodäthylat d. s-Aethylphenylhydrazin (C. r. 137, 330 C. 1903 [2] 716; Bl. [3] 29, 969 C. 1903 [2] 1115).  
 $C_{10}H_{18}ON_2$  18) Oxim d.  $\alpha$ -Anhydropulegonhydroxylamin. Sm. 181° (B. 37, 953 C. 1904 [1] 1087).  
 19) 5-Keto-4-Aethyl-3-Amyl-4,5-Dihydropyrazol. Sm. 138—139° (Bl. [3] 31, 596 C. 1904 [2] 26).  
 20) 2,5-Diisobutyl-1,3,4-Oxdiazol. Sd. 232° (J. pr. [2] 69, 483 C. 1904 [2] 537).  
 21) Amid d.  $\alpha$ -Cyanoktan- $\alpha$ -Carbonsäure. Sm. 137,5° (C. 1903 [2] 193).  
 $C_{10}H_{18}O_2N_2$  \*8) d- $\beta$ -[3-Oxamido-5-Oximido-4-Methylhexahydrophenyl]propen +  $\frac{1}{2}H_2O$ . Sm. 106° (A. 330, 268 C. 1904 [1] 947).  
 16) l- $\beta$ -[3-Oxamido-5-Oximido-4-Methylhexahydrophenyl]propen (l-Oxamidocarvoxim). Sm. 109°. 2HCl (A. 330, 273 C. 1904 [1] 948).  
 17)  $\beta$ -[2-Hydroxynitrosamido-4-Methylhexahydrophenyl]propen. Sm. 52° (B. 36, 486 C. 1903 [1] 637).  
 18) Oxim d. Hydroxylamidodihydrourambellulon (Soc. 85, 636 C. 1904 [1] 1607 C. 1904 [2] 333).  
 19) Eucarvonoxaminoxim. Sm. 141—142°. Oxalat (A. 330, 275 C. 1904 [1] 948).  
 $C_{10}H_{18}O_2N_8$  C 42,6 — H 6,4 — O 11,3 — N 39,7 — M. G. 282.  
 1) Verbindung (aus Porphyrerin). Sm. 280° u. Zers. (B. 36, 1299 C. 1903 [1] 1256).  
 $C_{10}H_{18}O_3N_2$  7) Methylmonamid d. l-Methyltetrahydropyrrol-2,2-Dicarbonsäuremonoäthylester. Sm. 199,5—200° (A. 326, 115 C. 1903 [1] 843).  
 $C_{10}H_{18}O_4N_2$  12) Monoureid d. Heptan- $\delta\delta$ -Dicarbonsäure. Sm. 147° (D.R.P. 144431 C. 1903 [2] 813; A. 335, 363 C. 1904 [2] 1382).  
 $C_{10}H_{18}O_4N_6$  C 41,9 — H 6,3 — H 22,4 — N 29,4 — M. G. 286.  
 1) Isobutylester d.  $\alpha\beta$ -Disemicarbazonbuttersäure. Sm. 254—255° (C. r. 138, 1222 C. 1904 [2] 27).  
 $C_{10}H_{18}O_4S$  5) l-Borneolschwefelsäure. K (C. r. 125, 111). — \*III, 338.  
 $C_{10}H_{18}O_5N_2$  2) Diäthylester d.  $\alpha$ -Carboxylamidoacetylamidopropionsäure (Carbäthoxylglycylalaninäthylester). Sm. 65,5—66,5° (B. 36, 2111 C. 1903 [2] 345).  
 $C_{10}H_{18}O_5N_4$  C 43,8 — H 6,6 — O 29,2 — N 20,4 — M. G. 274.  
 1) Äthylester d. Tri[Amidoacetyl]amidoessigsäure. Zers. bei 270°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Pikrat (B. 37, 1287 C. 1904 [1] 1336; B. 37, 2504 C. 1904 [2] 426).  
 $C_{10}H_{18}O_5Cl_6$  1) Verbindung (aus Dichloressigsäurealdehyd u. 2 Molec.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dioxyäthanmonoäthyläther). Sd. 110—111° (G. 33 [2] 399 C. 1904 [1] 921).  
 $C_{10}H_{18}NCl$  5) Amidohydrochlorpinen. (2HCl, PtCl<sub>4</sub>) (C. 1903 [1] 513).  
 6) Chlorlupinid. (HCl, AuCl<sub>3</sub>) (A. 235, 278). — \*III, 664.  
 $C_{10}H_{18}N_2S$  1) 2,5-Diisobutyl-1,3,4-Thiodiazol. Sd. 130—132°<sub>26</sub> (J. pr. [2] 69, 484 C. 1904 [2] 537).  
 $C_{10}H_{19}ON$  \*2)  $\beta$ -[2-Hydroxylamido-4-Methylhexahydrophenyl]propen. Sd. 122 bis 123°<sub>14</sub>. (2HCl, PtCl<sub>4</sub>), Oxalat (B. 36, 485 C. 1903 [1] 637).  
 \*4) 3-Keto-4-[ $\alpha$ -Amidoisopropyl]-1-Methylhexahydrobenzol (Pulegonamin). Sd. 99—100°<sub>10</sub> (B. 37, 2287 C. 1904 [2] 442).  
 \*12)  $\alpha$ -Isooxim d. l-Menthon. Sm. 88—89° (C. 1904 [2] 1045).  
 \*39) Lupinin. Sm. 68—69° (Ar. 242, 411 C. 1904 [2] 782).  
 42) Base (aus  $\alpha$ -Anhydropulegonhydroxylamin). Sd. 106°<sub>11</sub> (B. 37, 956 C. 1904 [1] 1087).  
 43) Oxim d. l-P-Menthon. Sm. 88—89° (C. 1904 [2] 1045).  
 44) Benzoat d. l-Menthonoxim. Sm. 54° (A. 332, 351 C. 1904 [2] 653).  
 45) Amid d. r- $\alpha$ -Dihydrocampholensäure. Sm. 126° (C. r. 136, 1143 C. 1903 [1] 1410).

- $C_{10}H_{15}ON_3$  9) Semicarbazon d. Dihydropulegenon. Sm. 193—195° (198—199°) (A. 327, 136 C. 1903 [1] 1412).
- 10) 2-Semicarbazon-1-Methyl-3-Isopropyl-R-Pentamethylen. Sm. 196 bis 197° (B. 37, 238 C. 1904 [1] 726).
- $C_{10}H_{15}O_2N$  11) Pinolonsemicarbazon. Sm. 158° (B. 28, 2710). — \*III, 382.
- 19) 4-[ $\alpha$ -Nitroisopropyl]-1-Methylhexahydrobenzol. Sd. 135—137° (C. 1904 [1] 1517).
- 20)  $\beta$ -Oximido- $\beta$ -Oxy- $\beta$ -Dimethyl- $\beta$ -Oktan (Citronellalhydroxansäure). Cu (G. 34 [2] 72 C. 1904 [2] 734).
- 21) 1,2,2,5,5-Pentamethyltetrahydropyrrol-3-Carbonsäure +  $2\frac{1}{2}H_2O$ . Sm. 129°. HCl, (2HCl,  $PtCl_4$ ) (B. 36, 3360 C. 1903 [2] 1185).
- 22) Methylester d. 2,2,5,5-Tetramethyltetrahydropyrrol-3-Carbonsäure. Sd. 206°<sub>760</sub> (B. 36, 3359 C. 1903 [2] 1185).
- 23) Amid d. cis-5-Oxy-1,1,3-Trimethylhexahydrobenzol-5-Carbonsäure. Sm. 128—129°; Sd. 190°<sub>15</sub> (D.R.P. 141699 C. 1903 [1] 1245).
- 24) Amid d. trans-5-Oxy-1,1,3-Trimethylhexahydrobenzol-5-Carbonsäure. Sm. 196°; Sd. 210°<sub>38</sub> (D.R.P. 141699 C. 1903 [1] 1245).
- 25) Imid d. Valeriansäure. Sm. 100° (C. r. 137, 130 C. 1903 [2] 552).
- 26) Imid d. Isovaleriansäure. Sm. 94° (C. r. 137, 129 C. 1903 [2] 552).
- 27) Verbindung (aus Hydroxylamin u. Dihydrocarboxyd). Sm. 111—112° (113—114°). HCl (A. 279, 386; B. 36, 767 C. 1903 [1] 836). — III, 505.
- 28) Verbindung (aus Hydroxylamin u. Dihydrocarboxyd). Sm. 164—165° (A. 279, 386; B. 36, 765 C. 1903 [1] 836). — III, 505.
- $C_{10}H_{15}O_2N_3$  2) 2-Oxy-4-[ $\alpha$ -Semibarbazonäthyl]-1-Methylhexahydrobenzol. Sm. 206—207° (B. 36, 767 C. 1903 [1] 836).
- $C_{10}H_{15}O_3N$  14) 2-Oximido-4-[ $\alpha\beta$ -Dioxyisopropyl]-1-Methylhexahydrobenzol. Sm. 202° (B. 28, 2705). — \*III, 375.
- 15)  $\alpha$ -Oximido- $\beta$ -Methyloktan- $\alpha$ -Carbonsäure. Sm. 89—90° (Bl. [3] 31, 1075 C. 1904 [2] 1458).
- $C_{10}H_{15}O_3N_3$  7)  $\gamma$ -Semicarbazon- $\beta$ -Methylheptan- $\zeta$ -Carbonsäure. Sm. 164° (A. 327, 141 C. 1903 [1] 1412).
- 8)  $\zeta$ -Semicarbazon- $\beta$ -Methylheptan- $\gamma$ -Carbonsäure. Sm. 140° (B. 37, 238 C. 1904 [1] 726).
- 9)  $\gamma$ -Semicarbazon- $\beta$ -Methylheptan- $\zeta$ -Carbonsäure. Sm. 167—168° (B. 37, 238 C. 1904 [1] 726).
- 10) Semicarbazon d. Säure  $C_9H_{16}O_8$  (aus Dihydropulegenon). Sm. 140 bis 143° (A. 327, 138 C. 1903 [1] 1412).
- 11) Aethylester d.  $\epsilon$ -Semicarbazon- $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. Sm. 162—163° (Bl. [3] 31, 1152 C. 1904 [2] 1707).
- 12) Isobutylester d.  $\alpha$ -Semicarbazonbutan- $\alpha$ -Carbonsäure. Sm. 137 bis 138° (Bl. [3] 31, 1150 C. 1904 [2] 1707).
- 13) Capronat d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 91° (C. r. 138, 1275 C. 1904 [2] 93).
- $C_{10}H_{15}O_4N_3$  3)  $\alpha$ -Amidoisocapronylamidoacetylamidoessigsäure. Sm. 235° u. Zers. (B. 36, 2990 C. 1903 [2] 1112).
- $C_{10}H_{15}O_5N$  2)  $\delta$ -[ $\beta\gamma\delta\epsilon$ -Tetraoxyamyl]imido- $\beta$ -Ketopentan (Acetylacetomarinamin). Sm. 160° (C. r. 136, 1081 C. 1903 [1] 1305).
- $C_{10}H_{15}O_5P$  1) Phosphat d.  $\alpha$ -Oxy- $\beta$ -Methylpropan- $\beta$ -Carbonsäure +  $H_2O$ . Sm. 110 bis 120° (148° wasserfrei).  $K_3 + 5H_2O$  (Bl. [3] 31, 157 C. 1904 [1] 868).
- $C_{10}H_{20}ON_2$  15) r-5-Ureidomethyl-1,1,2-Trimethyl-R-Pentamethylen (r- $\alpha$ -Dihydrocampholenaminharnstoff). Sm. 112° (C. r. 136, 1143 C. 1903 [1] 1410).
- $C_{10}H_{20}O_2N_2$  4) Amid d. Oktan- $\alpha\beta$ -Dicarbonsäure (M. 24, 626 C. 1903 [2] 1236).
- 16)  $\alpha\alpha$ -Di[Acetylamido]hexan. Sm. 145° (M. 25, 971 C. 1904 [2] 1598).
- 17)  $\alpha\beta$ -Di[4-Morpholyl]äthan (Aethylenbismorpholin). Sm. 74°; Sd. 153 bis 154°. 2HCl, (2HCl,  $PtCl_4$ ), 2(HCl,  $AuCl_3$ ), Dipikrat, Pikrolonat (B. 35, 4472 C. 1903 [1] 403).
- 18) 3-Nitroso-4,4,6-Trimethyl-2-Isopropyltetrahydro-1,3-Oxazin. Fl. (M. 25, 855 C. 1904 [2] 1240).
- 19) Amid d.  $\beta$ -Methylheptan- $\gamma\zeta$ -Dicarbonsäure. Sm. 242° (C. r. 136, 458 C. 1903 [1] 696).
- $C_{10}H_{20}O_3N_2$  3) Di[Propylamid] d. 1-Aepfelsäure. Sm. 125,5° (Soc. 83, 1325 C. 1904 [1] 82).
- $C_{10}H_{20}NCl$  5) Chlormethylat d.  $\beta$ -Aethylchinclidin. 2 +  $PtCl_4$  (B. 37, 3251 C. 1904 [2] 996).

- $C_{10}H_{20}NCl$  6) Chloräthylat d. d- $\alpha$ -Conicein. 2 +  $PtCl_4$  (B. 37, 1897 C. 1904 [2] 238).  
7) Chloräthylat d. i- $\alpha$ -Conicein. 2 +  $PtCl_4$  (B. 37, 1899 C. 1904 [2] 238).
- $C_{10}H_{20}NJ$  6) Jodmethylat d.  $\beta$ -Aethylchinclidin. Sm. 55° (B. 37, 3250 C. 1904 [2] 996).  
7) Jodäthylat d. d- $\alpha$ -Conicein. Sm. 170—171° (B. 37, 1897 C. 1904 [2] 238).  
8) Jodäthylat d. i- $\alpha$ -Conicein. Sm. 168—169° (B. 37, 1899 C. 1904 [2] 238).  
9) Jodäthylat d. i- $\epsilon$ -Conicein. Sm. 176—177° (B. 37, 1891 C. 1904 [2] 238).
- $C_{10}H_{20}N_2S$  2) d-sec. Butylamid d. Hexahydropyridin-1-Thiocarbonsäure. Sm. 114° (Ar. 242, 62 C. 1904 [1] 998).
- $C_{10}H_{21}ON$  \*2) 3-Hydroxylamido-1-Methyl-4-Isopropylhexahydrobenzol (B. 36, 486 C. 1903 [1] 637).  
19) 3-Oxy-4-[ $\alpha$ -Amidoisopropyl]-1-Methylhexahydrobenzol (Tetrahydro- $\alpha$ -Anhydropulegonhydroxylamin). Sd. 134—135°<sub>18</sub> (B. 37, 956 C. 1904 [1] 1087; B. 37, 2285 C. 1904 [2] 441).  
20) 4,4,6-Trimethyl-2-Isopropyltetrahydro-1,3-Oxazin. Sd. 171—173°<sub>744</sub>. (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ) (M. 25, 852 C. 1904 [2] 1240).
- $C_{10}H_{21}ON_3$  \*2)  $\beta$ -Semicarbazonnonan. Sm. 119—120° (Soc. 81, 1588 C. 1903 [1] 29, 162).  
7)  $\delta$ -Semicarbazonnonan. Sm. 73—74° (Bl. [3] 31, 1158 C. 1904 [2] 1708).  
8)  $\beta$ -Semicarbazon- $\delta$ -Methyloktan. Sm. 75° (Soc. 81, 1595 C. 1903 [1] 16, 132).
- $C_{10}H_{21}OBr$  1) Amyläther d.  $\epsilon$ -Brom- $\alpha$ -Oxypentan. Sd. 130—131°<sub>20</sub> (C. r. 138, 1611 C. 1904 [2] 429).
- $C_{10}H_{21}O_2N$  \*5)  $\delta$ -Oxy- $\gamma$ -Oximidomethyl- $\beta\zeta$ -Dimethylheptan. Sd. 157°<sub>14</sub> (M. 25, 1042 C. 1904 [2] 1599).  
10) Nitrit d.  $\alpha$ -Oxydekan. Sd. 105—108°<sub>12</sub> (C. r. 136, 1564 C. 1903 [2] 339).  
11) Diäthylamidoformiat d.  $\gamma$ -Oxypentan. Sd. 206—208° (Bl. [3] 31, 690 C. 1904 [2] 198).
- $C_{10}H_{21}O_3N$  2) Tropincholin. 2Chlorid +  $PtCl_4$ , Nitrat (C. 1898 [2] 889; 1899 [1] 119). — \*III, 606.  
3) Nitrat d.  $\alpha$ -Oxydekan. Sd. 127—128°<sub>11</sub> (C. r. 136, 1563 C. 1903 [2] 338).
- $C_{10}H_{22}ON_2$  \*1) Diisoamylnitrosamin. Sd. 132,4—132,8°<sub>14,5</sub> (B. 36, 2477 C. 1903 [2] 559).
- $C_{10}H_{22}O_4S$  \*2) Diisoamylester d. Schwefelsäure. Sd. 149—151°<sub>12</sub> (Am. 30, 221 C. 1903 [2] 937).
- $C_{10}H_{22}NJ$  10) Jodmethylat d. 2-Methyl-5-Isopropyltetrahydropyrrol. Sm. 242 243° (C. 1903 [2] 1324).
- $C_{10}H_{22}N_2S$  2)  $\alpha$ -[d-sec. Butyl]- $\beta$ -Isoamylthioharnstoff. Sm. 43—44° (Ar. 242, 61 C. 1904 [1] 998).
- $C_{10}H_{23}ON$  4)  $\theta$ -Amido- $\beta$ -Oxy- $\beta\zeta$ -Dimethyloktan. Sd. 140°<sub>15</sub> (Bl. [3] 29, 1049 C. 1903 [2] 1439).  
5)  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta\epsilon$ -Dimethylhexan. Sd. 98°<sub>24</sub> (C. r. 138, 767 C. 1904 [1] 1196).  
6) Aethylhydroxyd d. 1-Propylhexahydropyridin. d-Bromcampher-sulfonat (Soc. 83, 1142 C. 1903 [2] 1062).
- $C_{10}H_{23}O_4P$  \*2) Di[ $\alpha$ -Oxyisoamyl]unterphosphorige Säure. Sm. 230° (C. 1904 [2] 1709).  
3) Säure (aus Oenanthaldehyd). Sm. 131° (C. r. 138, 1708 C. 1904 [2] 422).
- $C_{10}H_{24}O_4N_2$  C 50,8 — H 10,2 — O 27,1 — N 11,9 — M. G. 236.  
1)  $\alpha\beta$ -Di[ $\beta$ -Oxyäthylamido]äthan. Fl. (2HCl,  $PtCl_4$ ) (B. 35, 4471 C. 1903 [1] 403).
- $C_{10}H_{24}N_2Cl_2$  1) Di[Chlormethylat] d. 1,4-Diäthylhexahydro-1,4-Diazin. 2 +  $PtCl_4$  (B. 36, 145 C. 1903 [1] 526).
- $C_{10}H_{24}N_3J$  \*1) Jodmethylat d. 1,3,5-Triäthylhexahydro-1,3,5-Triazin. Sm. 98 bis 99° (A. 334, 219 C. 1904 [2] 899).

- $C_{10}H_4O_2ClBr$  1) 3-Chlor-4-Brom-1,2-Naphtochinon. Sm. 181,5° (B. 33, 2412). — \*III, 382.
- $C_{10}H_4O_3Cl_2Br_2$  1) 2,3-Dichlor-2,4-Dibrom-1-Keto-2,3-Dihydroinden-6-Carbonsäure. Sm. 205–206° (A. 293, 161). — \*II, 984.
- $C_{10}H_4O_3N_2Cl_2$  1) 1,4-Dichlor-1,4-Dinitro-2,3-Diketo-1,2,3,4-Tetrahydronaphtalin + 2H<sub>2</sub>O. Sm. 155° u. Zers. (A. 334, 355 C. 1904 [2] 1054).
- $C_{10}H_4O_3N_2Br_2$  1) 1,4-Dibrom-1,4-Dinitro-2,3-Diketo-1,2,3,4-Tetrahydronaphtalin + 2H<sub>2</sub>O. Sm. 134° (A. 334, 365 C. 1904 [2] 1055).
- $C_{10}H_5ON_2Br$  2) Anhydrid d. 4-Brom-2-Oxy-1-Diazonaphtalin. Sm. 132–133° u. Zers. (C. 1903 [1] 401).
- $C_{10}H_5ON_2Br_2$  2) 2,4-Dibrom-1-Diazonaphtalin. Sulfat (C. 1903 [1] 401).
- $C_{10}H_5O_3NBr$  \*3) 6-Brom-1-Nitro-2-Oxynaphtalin. Sm. 122–123° (A. 333, 369 C. 1904 [2] 1117).
- 8) 4-Brom-2-Nitro-1-Oxynaphtalin. Sm. 102° (A. 333, 368 C. 1904 [2] 1117).
- $C_{10}H_5O_3N_2S$  \*1) 2,4-Dinitro-1-Oxynaphtalin-7-Sulfonsäure. K<sub>2</sub> + 1½H<sub>2</sub>O, Na<sub>2</sub> + 3H<sub>2</sub>O, Ca + 4H<sub>2</sub>O (B. 37, 3476 C. 1904 [2] 1225).
- $C_{10}H_7ON_2Cl$  1) 1-Chlor-2-Diazonaphtalin. Sulfat (C. 1903 [1] 401).
- $C_{10}H_7O_2NS_2$  1) 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]tetrahydrothiazol. Sm. 200° u. Zers. (M. 23, 960 C. 1903 [1] 284).
- $C_{10}H_7O_2N_2Cl$  4) 5-Chlor-4,6-Diketo-2-Phenyl-3,4,5,6-Tetrahydro-1,3-Diazin. Sm. noch nicht bei 320° (Soc. 83, 379 C. 1903 [1] 1144).
- $C_{10}H_7O_3NS$  1) 2,4-Diketo-5-[2-Oxybenzyliden]tetrahydrothiazol. Sm. 230° u. Zers. (M. 23, 964 C. 1903 [1] 284).
- $C_{10}H_7O_3ClS$  \*1) 1-Chlornaphtalin-2-Sulfonsäure + 3½H<sub>2</sub>O. Sm. 130–133° u. Zers. (R. 23, 182 C. 1904 [2] 228).
- $C_{10}H_7O_3N_2Cl_3$  1) Aethylester d. Trichlordinitrophenylessigsäure. Sm. 87–88° (Am. 31, 383 C. 1904 [1] 1409).
- $C_{10}H_7O_7ClS_2$  \*2) 8-Chlor-1-Oxynaphtalin-3,6-Disulfonsäure (D.R.P. 147852 C. 1904 [1] 133).
- $C_{10}H_7O_3N_3Cl_2$  1) Aethylester d. 3,5-Dichlor-2,4,6-Trinitrophenylessigsäure. Sm. 130–131° (Am. 32, 175 C. 1904 [2] 951).
- $C_{10}H_7O_3ClS_2$  1) p-Chlor-1,8-Dioxynaphtalin-3,6-Disulfonsäure (D.R.P. 153195 C. 1904 [2] 575).
- $C_{10}H_8ONBr$  8) Methyläther d. 5-Brom-6-Oxychinolin. Sm. 94–95° (B. 36, 459 C. 1903 [1] 590).
- $C_{10}H_8ON_2Br_2$  3) 6,8-Dibrom-4-Keto-2-Aethyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 278–280° (C. 1903 [2] 1194).
- 4) 6,8-Dibrom-4-Keto-3-Aethyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 278–280° (C. 1903 [2] 1194).
- $C_{10}H_8ON_2S$  5) 4-Benzoyl-5-Methyl-1,2,3-Thiodiazol. Sm. 43°. + H<sub>2</sub>O (A. 325, 171 C. 1903 [1] 645).
- 6) 4-Acetyl-5-Phenyl-1,2,3-Thiodiazol. Sm. 70° (A. 325, 174 C. 1903 [1] 645).
- $C_{10}H_8O_2NCl$  7) 4-Chlor-1-[α-Oximidoäthyl]benzofuran. Sm. 162–164° (A. 312, 334). — \*III, 530.
- 8) 5-Chlor-6-Oxy-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 290° u. Zers. (B. 36, 462 C. 1903 [1] 590).
- $C_{10}H_8O_2N_2S$  2) 2-Imido-4-Keto-5-[2-Oxybenzyliden]tetrahydrothiazol. Sm. 215° u. Zers. (M. 23, 963 C. 1903 [1] 284).
- $C_{10}H_8O_2N_3Br$  2) 4-Oximido-5-Keto-3-Methyl-1-[4-Bromphenyl]-4,5-Dihydro-pyrazol. Sm. 188° (A. 328, 76 C. 1903 [2] 249).
- $C_{10}H_8O_3NCl$  3) γ-Keto-α-[4-Chlor-2-Nitrophenyl]-α-Buten. Sm. 102° (B. 37, 1867 C. 1901 [1] 1601).
- $C_{10}H_8O_3NBr$  8) γ-Keto-α-[4-Brom-2-Nitrophenyl]-α-Buten. Sm. 109° (B. 37, 1869 C. 1904 [1] 1601).
- $C_{10}H_8O_3N_4S$  1) 1-Phenylazoimidazol-4[oder 5]-Carbonsäure-1'-Sulfonsäure. Zers. oberh. 265° (B. 37, 702 C. 1904 [1] 1562).
- $C_{10}H_9ONS_2$  2) 2-Thiocarbonyl-4-Keto-5-Methyl-3-Phenyltetrahydrothiazol. Sm. 118–119° (M. 25, 179 C. 1904 [1] 896).
- $C_{10}H_9ON_2S_2$  2) 4-Methylphenylamid d. Trochodactyloncarbonsäure. Sm. 182° (Soc. 83, 92 C. 1903 [1] 1117).

- $C_{10}H_9O_2NCl_2$  1) Methyl-3-Chlor-4-Acetylchloramidophenylketon. Sm. 56° (Soc. 85, 341 C. 1904 [1] 1404).
- $C_{10}H_9O_2NJ_2$  1) 2,4-Dijodphenylimid d. Essigsäure. Sm. 93° (C. r. 139, 65 C. 1904 [2] 590).  
2) 2,6-Dijodphenylimid d. Essigsäure. Sm. 147° (C. r. 138, 1505 C. 1904 [2] 319).
- $C_{10}H_9O_2NS$  8) Aethylester d. Benzthiazol-1-Carbonsäure. Sm. 70—71° (B. 37, 3732 C. 1904 [2] 1451).
- $C_{10}H_9O_2N_2Cl$  \*1) Dimethyläther d. 4-Chlor-5,6-Dioxy-2,3-Benzdiazin (Chloropiazin) (B. 36, 3374 C. 1903 [2] 1191).
- $C_{10}H_9O_2N_2J$  5) Jodmethylat d. 8-Nitrochinolin. Zers. oberh. 100° (B. 36, 261 C. 1903 [1] 524).
- $C_{10}H_9O_2N_2Se$  1)  $\alpha$ -Phenyl- $\beta$ -Selencyanacetylarnstoff. Sm. 147—148° (Ar. 241, 192 C. 1903 [2] 103).
- $C_{10}H_9O_2ClBr_4$  1) Verbindung (aus 2,5,6-Tribrom-3-Oxy-4-Keto-1-[ $\beta$ -Brompropylden]-1,4-Dihydrobenzol). Sm. 102—103° (A. 329, 33 C. 1903 [2] 1436).
- $C_{10}H_9O_3NS$  \*1) 1-Amidonaphtalin-2-Sulfonsäure. Sm. 262—265° u. Zers.  $NH_4$  (R. 23, 180 C. 1904 [2] 227).  
\*14) 1-Naphtylsulfaminsäure.  $NH_4$ , Ba + 3H<sub>2</sub>O (R. 23, 182 C. 1904 [2] 227).  
33) Hydroxylamid d. Naphtalin-1-Sulfonsäure. Sm. 153° u. Zers. (C. 1902 [2] 692; G. 33 [2] 305 C. 1904 [1] 288).
- $C_{10}H_9O_3N_2Cl$  2) 3-Chlor-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 120 bis 130° u. Zers. (B. 36, 1207 C. 1903 [1] 1417).
- $C_{10}H_9O_3N_2Br$  \*2) 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin (B. 36, 1205 C. 1903 [1] 1417).
- $C_{10}H_9O_4NBr_2$  3) Methyläther d.  $\alpha$ -Bromäthyl-3-Brom- $\beta$ -Nitro-4-Oxyphenylketon. Sm. 92° (B. 37, 1548 C. 1904 [1] 1437).
- $C_{10}H_9O_4NS$  \*7) 7-Amido-1-Oxynaphtalin-3-Sulfonsäure (J. pr. [2] 69, 90 C. 1904 [1] 813).  
\*27) 6-Amido-1-Oxynaphtalin-3-Sulfonsäure (J. pr. [2] 69, 82 C. 1904 [1] 812).  
41) 8-Amido-1-Oxynaphtalin-4-Sulfonsäure (D.R.P. 140710 C. 1903 [1] 1058; D.R.P. 147852 C. 1904 [1] 133; J. pr. [2] 69, 86 C. 1904 [1] 813).
- $C_{10}H_9O_4N_2Cl$  2) Diacetat d. 2-Chlor-1,4-Dioximido-1,4-Dihydrobenzol. Sm. 171 bis 172° (A. 303, 10). — \*III, 257.
- $C_{10}H_9O_4N_2Br$  3) 5-Brom- $\beta$ -Dinitro-1,2,3,4-Tetrahydronaphtalin. Sm. 91° (Soc. 85, 747 C. 1904 [2] 447).  
4) 6-Brom- $\beta$ -Dinitro-1,2,3,4-Tetrahydronaphtalin. Sm. 105—106° (Soc. 85, 747 C. 1904 [2] 447).
- $C_{10}H_9O_6NS_2$  \*8) 1-Amidonaphtalin-4,8-Disulfonsäure (J. pr. [2] 69, 80 C. 1904 [1] 812).
- $C_{10}H_9O_7NS_2$  \*4) 8-Amido-1-Oxynaphtalin-3,6-Disulfonsäure (D.R.P. 147852 C. 1904 [1] 133; D.R.P. 153557 C. 1904 [2] 750).
- $C_{10}H_{10}ONCl$  12) 1-Chlor-2-Nitroso-1-Methyl-2,3-Dihydroinden (Methylindennitrosochlorid) (A. 336, 4 C. 1904 [2] 1465).
- $C_{10}H_{10}ON_2S$  \*1) 2-Thiocarbonyl-5-Keto-4-Methyl-1-Phenyltetrahydroimidazol. Sm. 185° (Bl. [3] 29, 1195 C. 1904 [1] 361).
- $C_{10}H_{10}ON_2Se$  1) Methylphenylamid d. Selencyanessigsäure. Sm. 78° (Ar. 241, 216 C. 1903 [2] 104).  
2) 2-Methylphenylamid d. Selencyanessigsäure. Sm. 126° (Ar. 241, 204 C. 1903 [2] 104).  
3) 3-Methylphenylamid d. Selencyanessigsäure. Sm. 136° (Ar. 241, 205 C. 1903 [2] 104).  
4) 4-Methylphenylamid d. Selencyanessigsäure. Sm. 160° (Ar. 241, 206 C. 1903 [2] 104).
- $C_{10}H_{10}OClJ$  1)  $\alpha$ [oder  $\beta$ ]-Chlor- $\beta$ [oder  $\alpha$ ]-Jod- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 59 bis 60° u. Zers. (C. 1904 [2] 507).
- $C_{10}H_{10}O_2NCl$  8) Methyl-3-Chlor-4-Acetylamidophenylketon. Sm. 163° (Soc. 85, 341 C. 1904 [1] 1404).  
9) Methyl-4-Acetylchloramidophenylketon. Sm. 92° (C. 1903 [1] 832; Soc. 85, 390 C. 1904 [1] 1404).

- $C_{10}H_{10}O_2NCl_3$  3)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Oxyäthyläther d.  $\alpha$ -Oximido- $\alpha$ -Phenyläthan (Chloralacetophenonoxim). Sm.  $81^\circ$  (C. 1897 [1] 300). — \*III, 100.
- $C_{10}H_{10}O_2NBr$  7) Methyl-4-Acetylbromamidophenylketon. Sm.  $83^\circ$  (C. 1903 [1] 832; Soc. 85, 390 C. 1904 [1] 1404).
- $C_{10}H_{10}O_2N_2S$  \*12) Hydrazid d. Naphthalin-2-Sulfonsäure. Sm.  $137$ — $139^\circ$  (C. 1904 [2] 1494).
- $C_{10}H_{10}O_2N_2Se$  1) 2-Methoxyphenylamid d. Selencyanessigsäure. Sm.  $110^\circ$  (Ar. 241, 214 C. 1903 [2] 104).  
2) 4-Methoxyphenylamid d. Selencyanessigsäure. Sm.  $131^\circ$  (Ar. 241, 215 C. 1903 [2] 104).
- $C_{10}H_{10}O_3N_4S$  1) 1-Phenylazo-2-Methylimidazol-1<sup>4</sup>-Sulfonsäure. Zers. bei  $250^\circ$  (B. 37, 699 C. 1904 [1] 1562).
- $C_{10}H_{10}O_4NCl$  \*7) Methyl ester d. 3-Chloracetylamo-4-Oxybenzol-1-Carbonsäure. Sm.  $191^\circ$  (A. 325, 332 C. 1903 [1] 771).  
8)  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -[4-Chlor-2-Nitrophenyl]butan. Sm.  $76^\circ$  (B. 37, 1866 C. 1904 [1] 1600).
- $C_{10}H_{10}O_4NBr$  9)  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -[4-Brom-2-Nitrophenyl]butan. Sm.  $92^\circ$  (B. 37, 1868 C. 1904 [1] 1601).
- $C_{10}H_{10}O_4N_4S_2$  1) Nitril d. Benzol-1,3-Di[Sulfonamidoessigsäure]. Sm.  $149$ — $150^\circ$  (B. 37, 4102 C. 1904 [2] 1727).
- $C_{10}H_{10}O_5NBr$  3) Aethyl-4-Brom-6-Nitro-2-Methylphenylester d. Kohlensäure. Sm.  $61$ — $62^\circ$  (Am. 32, 33 C. 1904 [2] 697).  
4) Aethyl-6-Brom-2-Nitro-4-Methylphenylester d. Kohlensäure. Sm.  $84$ — $85^\circ$  (Am. 32, 35 C. 1904 [2] 697).
- $C_{10}H_{11}ONCl_2$  4) 3,5-Dichlor-4-Acetylamo-1,2-Dimethylbenzol. Sm.  $185^\circ$  (Soc. 85, 278 C. 1904 [1] 1009).
- $C_{10}H_{11}ONBr_2$  8) Phenylamid d.  $\alpha\beta$ -Dibromisobuttersäure. Sm.  $128^\circ$  (B. 36, 1269 C. 1903 [1] 1219).
- $C_{10}H_{11}ONS_2$  \*4) Benzylester d. Acetylamidodithioameisensäure. Sm.  $135$ — $137^\circ$  (Bl. [3] 29, 51 C. 1903 [1] 446).  
5) Gem. Anhydrid d. Benzolcarbonsäure u. Aethylamidodithioameisensäure. Sm.  $76^\circ$  (B. 36, 3526 C. 1903 [2] 1326).  
6) Gem. Anhydrid d. Benzolcarbonsäure u. Dimethylamidodithioameisensäure (N-Dimethyl-S-Benzoyldithiourethan). Sm.  $59^\circ$  (B. 36, 3525 C. 1903 [2] 1326).
- $C_{10}H_{11}ON_3S$  2) 1-Amido-2-Thiocarbonyl-4-Keto-5-Methyl-3-Phenyltetrahydroimidazol. Sm.  $150^\circ$  (C. 1904 [2] 1027).  
3) 5-Merkapto-4-Methyl-1-Benzyl-4,5-Dihydro-1,2,4-Triazol-3,5-Oxyd. Sm.  $117^\circ$  (B. 37, 2334 C. 1904 [2] 314).  
4) Methyläther d. 3-Merkapto-5-Keto-4-Methyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm.  $95^\circ$  (B. 36, 3153 C. 1903 [2] 1074).  
5) Aethyläther d. 3-Merkapto-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm.  $138^\circ$  (B. 36, 3153 C. 1903 [2] 1074).  
6) 5-Thiocarbonyl-3-Keto-4-Methyl-1-Benzyltetrahydro-1,2,4-Triazol. Sm.  $157^\circ$  (B. 37, 2335 C. 1904 [2] 314).
- $C_{10}H_{11}OClBr_2$  2) Methyläther d. 3,6-Dibrom-5-Oxy-2-Chlormethyl-1,4-Dimethylbenzol. Sm.  $116$ — $117^\circ$  (A. 334, 302 C. 1904 [2] 985).
- $C_{10}H_{11}OBrHg$  1) 2-Oxy-1,2,3,4-Tetrahydronaphthalin-3-Quecksilberbromid. Sm.  $159^\circ$  (B. 36, 3706 C. 1903 [2] 1239).
- $C_{10}H_{11}OBr_2J$  1) Methyläther d. 3,6-Dibrom-5-Oxy-2-Jodmethyl-1,4-Dimethylbenzol. Sm.  $114$ — $115^\circ$  (A. 334, 303 C. 1904 [2] 985).
- $C_{10}H_{11}OJHg$  1) 2-Oxy-1,2,3,4-Tetrahydronaphthalin-3-Quecksilberjodid. Sm.  $156^\circ$  (B. 36, 3706 C. 1903 [2] 1239).
- $C_{10}H_{11}O_2NBr_2$  2) Acetat d. 2-[ $\alpha\beta$ -Dibrom- $\beta^1$ -Oxyisopropyl]pyridin. Sm.  $89$ — $90^\circ$  (B. 37, 745 C. 1904 [1] 1090).
- $C_{10}H_{11}O_2NS$  \*5) Dimethyläther d. Benzoylimidomerkaptooxymethan. Sm.  $43^\circ$ ; Sd.  $200^\circ_{20}$  (Am. 32, 364 C. 1904 [2] 1506).  
8) S-Phenylamid d. Thiooxalsäure-O-Aethylester. Fl. (B. 37, 3712 C. 1904 [2] 1449).
- $C_{10}H_{11}O_2N_2Cl$  9) 4-Chlor-1,2-Di[Acetylamo]benzol. Sm.  $201^\circ$  u. Zers. (B. 36, 4028 C. 1904 [1] 294).
- $C_{10}H_{11}O_2ClBr_2$  2) 3-Methyläther d. 5-Brom-3,4-Dioxy-1-[ $\alpha$ -Chlor- $\beta$ -Brompropyl]-benzol. Sm.  $110^\circ$  (A. 329, 15 C. 1903 [2] 1434).

- $C_{10}H_{11}O_2ClS$  2) Chlorid d. 1,2,3,4-Tetrahydronaphtalin-5-Sulfonsäure. Sm. 70,5° (*Soc.* 85, 756 *C.* 1904 [2] 449).
- $C_{10}H_{11}O_3ClHg$  1) Verbindung (aus Safrol). Zers. bei 170° (*B.* 36, 3579 *C.* 1903 [2] 1363).
- 2) isom. Verbindung (aus Safrol). Sm. 138° (*B.* 36, 3579 *C.* 1903 [2] 1363).
- $C_{10}H_{11}O_5N_2Br_3$  1) Verbindung (aus d. Verb.  $C_{10}H_{14}O_5N_2$ ). Sm. 78° (*Soc.* 85, 334 *C.* 1904 [1] 807, 1440).
- $C_{10}H_{11}O_6N_2Br$  4) Dimethyläther d.  $\beta$ -Brom- $\beta$ -Nitro- $\alpha\alpha$ -Dioxy- $\alpha$ -[4-Nitrophenyl]-äthan. Sm. 122,5–123° (*A.* 325, 16 *C.* 1903 [1] 287).
- $C_{10}H_{11}O_7NS$  3) 1-Propylester d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. K, Ba + 4H<sub>2</sub>O (*Am.* 30, 391 *C.* 1904 [1] 276).
- $C_{10}H_{11}O_7N_2Cl$  1) Diäthyläther d. 6-Chlor-2,4-Dinitro-1,3,5-Trioxybenzol. Sm. 102–103°. Ba (*B.* 35, 3856 *C.* 1903 [1] 21; *Am.* 31, 378 *C.* 1904 [1] 1409).
- $C_{10}H_{11}NBr_2S$  1)  $\beta\gamma$ -Dibrompropylamid d. Benzolthiocarbonsäure. Sm. 208–209° (*B.* 37, 878 *C.* 1904 [1] 1004).
- $C_{10}H_{12}ONCl$  \*21) 2,4-Dimethylphenylamid d. Chloressigsäure. Sm. 151–152° (*C.* 1903 [2] 110).
- $C_{10}H_{12}ONCl_3$  4) 2,4,6-Trimethylpyridin + Chloral. Sm. 139,5° (*B.* 37, 1335 *C.* 1904 [1] 1361).
- $C_{10}H_{12}ON_2S_2$  4) 5-Methyläther d. 5-Merkapto-2-Oxy-2-Methyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 182° (*J. pr.* [2] 67, 251 *C.* 1903 [1] 1265).
- 5) Methyl ester d. Acetylphenylamidodithioameisensäure. Sm. 126° (*J. pr.* [2] 67, 252 *C.* 1903 [1] 1265).
- 6) Äthylester d.  $\beta$ -Phenylthioureidothiolameisensäure. Sm. 131 bis 132° (*Am.* 30, 181 *C.* 1903 [2] 873).
- $C_{10}H_{12}O_2NCl$  \*8) Anetholnitrosylchlorid. Sm. 127–128°. Na (*A.* 332, 326 *C.* 1904 [2] 651; *C.* 1904 [2] 1038).
- $C_{10}H_{12}O_2N_2S$  17) Methyl ester d. 2-Methylphenylthiopseudoallophansäure. Sm. 175–176°. HCl (*Soc.* 83, 564 *C.* 1903 [1] 1123, 1306).
- 18) Methyl ester d. 4-Methylphenylthiopseudoallophansäure. Sm. 175–176° (*Soc.* 83, 563 *C.* 1903 [1] 1123).
- 19) Amid d. Phenylamidothioessigsäure-2-Carbonsäuremethyl ester. Sm. 178° (*D.R.P.* 141698 *C.* 1903 [1] 1244).
- $C_{10}H_{12}O_2N_2Se$  1) Methylphenylamid d. Carbaminselenessigsäure. Sm. 123 u. Zers. (*Ar.* 241, 216 *C.* 1903 [2] 104).
- $C_{10}H_{12}O_2N_3J$  1) Jodmethylat d. 6-Nitro-1,2-Dimethylbenzimidazol. Sm. 267°. + J<sub>2</sub> (*B.* 36, 3970 *C.* 1904 [1] 177).
- 2) Jodmethylat d. 9-Nitro-1,5-Dimethylbenzimidazol. Sm. 238°. + J<sub>2</sub> (*B.* 36, 3971 *C.* 1904 [1] 178).
- $C_{10}H_{12}O_2N_4S$  1)  $\alpha$ -[3-Nitrobenzyliden]amido- $\alpha\beta$ -Dimethylthioharnstoff. Sm. 227 bis 228° (*B.* 37, 2321 *C.* 1904 [2] 311).
- $C_{10}H_{12}O_3NBr$  \*1) 6-Brom-2-Nitro-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 109 bis 111° (*A.* 333, 357 *C.* 1904 [2] 1116).
- 6) Äthylester d. 5-Brom-2-Oxy-3-Methylphenylamidoameisensäure. Sm. 123° (*Am.* 32, 34 *C.* 1904 [2] 697).
- 7) Äthylester d. 5-Brom-6-Oxy-3-Methylphenylamidoameisensäure. Sm. 83° (*Am.* 32, 36 *C.* 1904 [2] 697).
- 8) Äthyl-4-Brom-6-Amido-2-Methylphenylester d. Kohlensäure. HCl (*Am.* 31, 501 *C.* 1904 [2] 95; *Am.* 32, 34 *C.* 1904 [2] 697).
- 9) Äthyl-6-Brom-2-Amido-4-Methylphenylester d. Kohlensäure. HCl (*Am.* 31, 501 *C.* 1904 [2] 95; *Am.* 32, 36 *C.* 1904 [2] 697).
- $C_{10}H_{12}O_3N_5Cl$  1) 8-Chloracetyl-amido-2,6-Diketo-1,3,7-Trimethylpurin. Sm. 208° (*D.R.P.* 139960 *C.* 1903 [1] 859).
- $C_{10}H_{12}O_4NBr$  2) Diäthyläther d. 6-Brom-4-Nitro-1,3-Dioxybenzol. Sm. 103 bis 104° (*Am.* 28, 467 *C.* 1903 [1] 323).
- $C_{10}H_{12}O_5N_2S$  1) 2-Nitro-4-Aethoxylphenylamid d. Äthensulfonsäure. Sm. 92° (*B.* 36, 3632 *C.* 1903 [2] 1327).
- $C_{10}H_{12}O_5N_2S$  1)  $r\alpha$ -[5-Nitro-2-Methylphenylsulfon]amidopropionsäure. Sm. 96°. Ba (*H.* 43, 70 *C.* 1904 [2] 1607).
- $C_{10}H_{12}O_6N_2S_2$  1) Amid d. 1,3-Phenylendi[Sulfonessigsäure]. Sm. 229–230° (*J. pr.* [2] 68, 327 *C.* 1903 [2] 1171).

- $C_{10}H_{12}O_8N_2S_2$  \*1) Benzol-1,3-Di[Sulfonamidoessigsäure]. Sm. 181° u. Zers. (B. 37, 4102 C. 1904 [2] 1727).
- $C_{10}H_{12}Cl_2BrJ$  2)  $\alpha\beta$ -Dichloräthyl-4-Aethylphenyljodoniumbromid. Sm. 129° (A. 327, 297 C. 1903 [2] 352).
- $C_{10}H_{13}ONS$  23) 4-Aethoxyphenylamid d. Thioessigsäure. Sm. 99—100° (B. 37, 876 C. 1904 [1] 1004).
- $C_{10}H_{18}ON_3Cl_2$  1) 4-Semicarbazon-1-Dichlormethyl-1,2-Dimethyl-1,4-Dihydrobenzol. Sm. 212° (B. 35, 4216 C. 1903 [1] 161).
- 2) 4-Semicarbazon-1-Dichlormethyl-1,3-Dimethyl-1,4-Dihydrobenzol. Sm. 182—186° (B. 35, 4217 C. 1903 [1] 161).
- $C_{10}H_{18}ON_3S_2$  1)  $\beta$ -Amid d.  $\alpha$ -Phenylhydrazin- $\alpha\beta$ -Di[Thiocarbonsäure]- $\alpha$ -Aethyl-ester. Sm. 173° u. Zers. (B. 37, 185 C. 1904 [1] 669).
- $C_{10}H_{15}O_2N_2Cl$  3)  $\gamma$ -Chlor- $\alpha$ -[4-Methylphenyl]nitrosamido- $\beta$ -Oxypropan. Sm. 70,5° (B. 37, 3035 C. 1904 [2] 1213).
- $C_{10}H_{15}O_2N_2S$  3) Aethylester d. Phenylthiosemicarbazidoameisensäure. Sm. 142° (P. GUTMANN, Dissert., Heidelberg 1903).
- $C_{10}H_{15}O_2ClHg$  1) Verbindung (aus Methylchavicol). Sm. 81—82° (B. 36, 3580 C. 1903 [2] 1363).
- 2) isom. Verbindung (aus Methylchavicol). Sm. 55° (B. 36, 3581 C. 1903 [2] 1363).
- $C_{10}H_{15}O_2BrHg$  1) Verbindung (aus Methylchavicol). Sm. 70° (B. 36, 3581 C. 1903 [2] 1363).
- $C_{10}H_{15}O_3NS$  6) 5-Amido-1,2,3,4-Tetrahydronaphtalin-8-Sulfonsäure +  $H_2O$ . Na +  $2H_2O$ , Ba +  $3H_2O$  (Soc. 85, 755 C. 1904 [2] 449).
- 7) 4-Aethoxyphenylamid d. Aethensulfonsäure. Sm. 88° (B. 36, 36 C. 1903 [2] 1363).
- $C_{10}H_{15}O_3ClS$  7) Chlorid d. 4-Oxy-1-Aethylbenzoläthyläther- $p$ -Sulfonsäure. Fl. (B. 36, 3594 C. 1903 [2] 1366).
- $C_{10}H_{15}O_4BrS$  4) 6-Brom-4-Oxy-1-tert. Butylbenzol-2-Sulfonsäure. K (Soc. 83, 330 C. 1903 [1] 875).
- $C_{10}H_{15}O_6N_2Br$  1) Verbindung (aus d. Verb.  $C_{10}H_{14}O_6N_2$ ). Sm. 157° (Soc. 85, 332 C. 1904 [1] 807, 1440).
- $C_{10}H_{14}ONCl$  6)  $\gamma$ -Chlor- $\alpha$ -[4-Methylphenyl]amido- $\beta$ -Oxypropan. Sm. 81—82° (B. 37, 3035 C. 1904 [2] 1213).
- $C_{10}H_{14}ONJ$  4) Jodmethylat d. 2-Dimethylamidobenzol-1-Carbonsäurealdehyd. Sm. 163,5° (B. 37, 978 C. 1904 [1] 1079).
- $C_{10}H_{14}O_2N_2Br_2$  2) Verbindung (aus Pilocarpin). (HBr, Br<sub>2</sub>) (C. r. 97, 1435). — III, 225.
- $C_{10}H_{14}O_3NCl$  \*1)  $\alpha$ -Chlor- $\alpha'$ -Nitrocampher (C. 1903 [2] 374).
- $C_{10}H_{14}O_3NBr$  \*4)  $\pi$ -Bromcamphoryloxim ( $\pi$ -Brom- $\alpha$ -Isonitrosocampher) (Soc. 83, 967 C. 1903 [1] 1611 C. 1903 [2] 666).
- 7)  $\beta$ -Bromcamphoryloxim +  $H_2O$ . Sm. 112° (Soc. 83, 966 C. 1903 [1] 1411 C. 1903 [2] 666).
- 8)  $\beta$ -Brom- $\alpha'$ -Nitrocampher. Sm. 114° (Soc. 83, 964 C. 1903 [2] 665).
- 9) Pseudo- $\beta$ -Brom- $\alpha'$ -Nitrocampher. Sm. 132° u. Zers. K +  $2H_2O$  (Soc. 83, 965 C. 1903 [1] 1411; C. 1903 [2] 665).
- $C_{10}H_{14}O_3NJ$  \*1) Jodmethylat d. Damascenin +  $H_2O$ . Sm. 172—173° wasserfrei (Ar. 242, 318 C. 1904 [2] 457).
- $C_{10}H_{14}O_5NP$  1) Trimethylester d. Phenylamidophosphinsäure-3-Carbonsäure. Sd. 184—186° (A. 326, 243 C. 1903 [1] 868).
- 2) Trimethylester d. Phenylamidophosphinsäure-4-Carbonsäure. Sd. 166—167° (A. 326, 244 C. 1903 [1] 868).
- $C_{10}H_{14}O_5N_3Cl$  1)  $\gamma$ -Lakton d.  $\zeta$ -Lakton- $\beta$ -Semicarbazon- $\varepsilon$ -Oxyhexan- $\alpha\gamma$ -Dicarbonsäure- $\alpha$ -Methylester. Sm. 132—133° (C. r. 136, 436 C. 1903 [1] 698).
- $C_{10}H_{15}OBrMg$  1) Magnesiumbromcampher. +  $(C_2H_5)_2O$  (B. 36, 2614 C. 1903 [2] 623).
- $C_{10}H_{15}O_2NS$  \*2) Diäthylamid d. Benzolsulfonsäure. Sm. 42—43° (B. 36, 2706 C. 1903 [2] 829).
- $C_{10}H_{15}O_2N_2Cl$  3) Chlorpernitrosocampher. Sm. 192° (C. 1903 [2] 373).
- 4) Isochlorpernitrosocampher. Sm. 75°. K (C. 1903 [2] 373).
- 5) Pseudochlorpernitrosocampher. Sm. 90°. HCl, Pikrat (C. 1903 [2] 373).

- $C_{10}H_{15}O_3N_2Cl$  6) Verbindung (aus Pseudochlorpernitrosocampher). Sm. 80° (C. 1903 [2] 374).
- $C_{10}H_{15}O_3N_2Br$  \*1)  $\alpha$ -Brompernitrosocampher. Sm. 114° (C. 1904 [2] 1697).
- \*2)  $\beta$ -Brompernitrosocampher. Sm. 67° (C. 1904 [2] 1697).
- $C_{10}H_{15}O_3NS$  10) Amid d. 4-Oxy-1-Aethylbenzoläthyläther-2-Sulfonsäure. Sm. 118° (B. 36, 3594 C. 1903 [2] 1366).
- 11) Methylamid d. 1-[ $\alpha$ -Oxyisopropyl]benzol-2-Sulfonsäure. Sm. 105—106° (B. 37, 3264 C. 1904 [2] 1031).
- $C_{10}H_{15}O_3BrS$  3) 1-Bromcamphersulfonsäure.  $NH_4$  (Soc. 79, 76). — \*III, 371.
- $C_{10}H_{15}O_3N_2P$  1) 3-Nitrophenylmonamid d. Phosphorsäurediäthylester. Sm. 120° (A. 326, 237 C. 1903 [1] 867).
- $C_{10}H_{15}O_3N_3J_2$  1) Äthylester d. Dijodacetyl[Amidoacetyl]amidoessigsäure. Sm. 190° u. Zers. (B. 37, 1296 C. 1904 [1] 1336).
- $C_{10}H_{15}O_3BrS$  \*1) Bromdihydrocampholensulfocarbonsäure. Sm. 155° u. Zers. (Soc. 83, 1110 C. 1903 [2] 794).
- $C_{10}H_{15}O_3N_4Cl$  1) Chloracetyltri[Amidoacetyl]amidoessigsäure. Sm. 256° u. Zers. (B. 37, 2507 C. 1904 [2] 427).
- $C_{10}H_{15}ONCl$  \*7) Pinennitrosylchlorid. Sm. 115° (Soc. 85, 759 C. 1904 [2] 220, 524).
- \*11)  $\beta$ -Chlorecampherroxim. Sm. 127° (C. 1903 [2] 373).
- $C_{10}H_{15}OCl_2Hg_2$  1) Verbindung (aus Camphen). Sm. noch nicht bei 250° (B. 36, 3576 C. 1903 [2] 1362).
- $C_{10}H_{16}O_2NCl$  4) sec. 1-Nitrohydrochlorpinen. Sm. 136—142° (C. 1903 [1] 513).
- 5) tert. Nitrohydrochlorpinen. Sm. 195—200° (C. 1903 [1] 513).
- $C_{10}H_{16}O_2NBr$  3) Bromnitrodihydrocamphen. Sm. 158—172° (C. 1903 [1] 513).
- $C_{10}H_{16}NClS$  1) Chlormethylat d. 4-Merkapto-2,6-Dimethylpyridin-4-Aethyläther. Sm. 136° (A. 331, 259 C. 1904 [1] 1223).
- $C_{10}H_{16}NClSe$  1) Chlormethylat d. 4-Seleno-2,6-Dimethylpyridin-4-Aethyläther. Sm. 126° (A. 331, 263 C. 1904 [1] 1223).
- $C_{10}H_{16}NJS$  1) Jodmethylat d. 4-Merkapto-2,6-Dimethylpyridin-4-Aethyläther. Sm. 154° u. Zers. (A. 331, 259 C. 1904 [1] 1223).
- $C_{10}H_{16}NJSe$  1) Jodmethylat d. 4-Seleno-2,6-Dimethylpyridin-4-Aethyläther. Sm. 155° (A. 331, 263 C. 1904 [1] 1223).
- $C_{10}H_{17}O_3N_2S$  1) 2-Thiocarbonyl-4-Keto-3,5,5-Trimethyltetrahydroimidazol-1- $\alpha$ -Amidoisobuttersäure. Sm. 129° (C. 1904 [2] 1028).
- $C_{10}H_{17}O_4N_2Br$  1)  $\alpha$ -Bromisocapronylamidoacetylamidoessigsäure. Sm. 144—145° (B. 36, 2989 C. 1903 [2] 1112).
- $C_{10}H_{18}ONCl$  \*1) Menthennitroschlorid. Sm. 117° (B. 37, 1375 C. 1904 [1] 1441).
- $C_{10}H_{18}ONJ$  2) Dihydroeucarvoximhydrojodid. Sm. 161—162° (B. 31, 2071). — \*III, 375.
- $C_{10}H_{18}O_2NCl$  4) i-Terpineolnitrosochlorid. Sm. 120—122° (Soc. 85, 666 C. 1904 [2] 330).
- 5) isom. i-Terpineolnitrosochlorid. Sm. 102—103° (C. 1901 [1] 1008).
- 6) Chlormethylat d. Methylscopolin. Sm. noch nicht bei 250°.
- 2 +  $PtCl_4$ , +  $AuCl_3$  (Ar. 236, 30). — \*III, 619.
- $C_{10}H_{20}O_3N_2Cl_2$  \*1) Bistrimethyläthylennitrosochlorid (B. 36, 1765 C. 1903 [2] 100).
- $C_{10}H_{20}O_3N_2Br_2$  1) bim.  $\beta$ -Brom- $\gamma$ -Nitroso- $\beta$ -Methylbutan. Sm. 67° (B. 37, 534 C. 1904 [1] 864).
- $C_{10}H_{22}ONCl$  1) Chloräthylat d. 3,4,4,6-Tetramethyltetrahydro-1,3-Oxazin. 2 +  $PtCl_4$ , +  $AuCl_3$  (M. 25, 840 C. 1904 [2] 1240).
- $C_{10}H_{22}NCl_2P$  1) Diamylamidodichlorphosphin. Sd. 140° (A. 326, 157 C. 1903 [1] 761).
- $C_{10}H_{24}O_3NP$  1) Dipropylmonamid d. Phosphorsäurediäthylester. Sd. 105—110° (A. 326, 185 C. 1903 [1] 820).
- $C_{10}H_{25}ON_2P$  1) Äthyläther d. Di[Diäthylamido]oxyphosphin. Sd. 105—108° (A. 326, 161 C. 1903 [1] 761).
- $C_{10}H_{25}O_2N_2P$  1) Di[Diäthylamid] d. Phosphorsäuremonoäthylester. Sd. 140° (A. 326, 195 C. 1903 [1] 820).
- $C_{10}H_{28}O_3N_2Cl_2$  \*1) Di[Chlormethylat] d. Di[Dimethylamidomethoxymethyl]äther. 2 +  $PtCl_4$  (A. 334, 18 C. 1904 [2] 947).

- $C_{10}H_8O_4N_2Cl_4S_2$  1) Di[Dichloramid] d. Naphtalin-2,7-Disulfonsäure. Sm. 165° (C. 1904 [2] 435).
- $C_{10}H_7O_2NCl_2S$  19) Dichloramid d. Naphtalin-1-Sulfonsäure. Sm. 91° (C. 1904 [2] 435).

- $C_{10}H_7O_2NCl_2S$  20) Dichloramid d. Naphtalin-2-Sulfonsäure. Sm. 68° (*C.* 1904 [2] 435).
- $C_{10}H_7O_3NCl_2S$  1) 2,4-Dichlor-1-Amidonaphtalin- $\beta$ -Sulfonsäure (D.R.P. 153 298 *C.* 1904 [2] 750).
- $C_{10}H_8O_3NClS$  \*6) 8-Chlor-1-Amidonaphtalin-5-Sulfonsäure (D.R.P. 147 852 *C.* 1904 [1] 133).
- $C_{10}H_8O_6NClS_2$  1) 8-Chlor-1-Amidonaphtalin-3,6-Disulfonsäure (D.R.P. 147 852 *C.* 1904 [1] 133).
- $C_{10}H_{10}O_6NClS$  1) 2-Chlorid d. 4-Nitrobenzol-1-Carbonsäurepropylester-2-Sulfonsäure. Sm. 76° (*Am.* 30, 390 *C.* 1904 [1] 276).
- $C_{10}H_{13}O_3NBr_2S$  1) 4-Aethoxyphenylamid d.  $\alpha\beta$ -Dibromäthan- $\alpha$ -Sulfonsäure. Sm. 139° (*B.* 36, 3633 *C.* 1903 [2] 1327).
- $C_{10}H_{14}O_3NCl_2P$  1) 2,4-Dichlorphenylmonamid d. Phosphorsäurediäthylester. Sm. 106° (*A.* 326, 229 *C.* 1903 [1] 867).
- $C_{10}H_{14}O_3NBr_2P$  1) 2,4-Dibromphenylmonamid d. Phosphorsäurediäthylester. Sm. 114° (*A.* 326, 235 *C.* 1903 [1] 867).
- $C_{10}H_{15}O_3NClBr$  1) Bromnitrohydrochlorpinen. Sm. 105—110° (*C.* 1903 [1] 513).
- $C_{10}H_{20}ON_2ClP$  2) 1,1'-Dipiperidid d. Phosphorsäuremonochlorid. Sm. 184°<sub>12</sub> (*A.* 326, 196 *C.* 1903 [1] 820).
- $C_{10}H_{20}N_2ClSP$  1) 1,1'-Dipiperidid d. Thiophosphorsäuremonochlorid. Sm. 98° (*A.* 326, 217 *C.* 1903 [1] 822).
- $C_{10}H_{22}ONCl_2P$  \*1) Diisoamylmonamid d. Phosphorsäuredichlorid. Sd. 150°<sub>12</sub> (*A.* 326, 186 *C.* 1903 [1] 820).
- $C_{10}H_{22}NCl_2SP$  \*1) Diamylmonamid d. Thiophosphorsäuredichlorid. Sd. 160—163°<sub>13</sub> (*A.* 326, 213 *C.* 1903 [1] 822).
- $C_{10}H_{23}O_2NClP$  1) Diisobutylmonamid d. Aethylphosphorsäuremonochlorid. Fl. (*A.* 326, 193 *C.* 1903 [1] 820).
- $C_{10}H_{25}ON_2ClS$  1) Di[Diäthylamid] d. Thiophosphorsäuremonoäthylester. Sd. 149 bis 151° (i.V.) (*A.* 326, 162 *C.* 1903 [1] 761).

C<sub>11</sub>-Gruppe.

- $C_{11}H_{12}$  5) Phenocyklohepten. Sd. 234° (*Soc.* 83, 247 *C.* 1903 [1] 586, 582).
- $C_{11}H_{14}$  \*4)  $\alpha$ -Phenyl- $\gamma$ -Methyl- $\alpha$ -Buten. Sd. 201—202° (207°<sub>757</sub>) (*B.* 37, 1088 *C.* 1904 [1] 1260; *B.* 37, 2316 *C.* 1904 [2] 217).
- \*6) 4-Isopropylphenyläthen. Sd. 76°<sub>10</sub> (*B.* 36, 1640 *C.* 1903 [2] 27).
- \*8) 2,4,5-Trimethylphenyläthen. Sd. 97°<sub>19</sub> (*B.* 36, 1641 *C.* 1903 [2] 27).
- \*11) 2,4,6-Trimethylphenyläthen. Sd. 206—207°<sub>755</sub> (*B.* 36, 1644 *C.* 1903 [2] 27).
- \*15)  $\delta$ -Phenyl- $\beta$ -Methyl- $\beta$ -Buten. Sd. 205° (*B.* 37, 2314 *C.* 1904 [2] 217).
- 16)  $\alpha$ -Phenyl- $\beta$ -Penten. Sd. 201° (*B.* 37, 2313 *C.* 1904 [2] 216).
- 17)  $\gamma$ -Phenyl- $\beta$ -Penten. Sd. 197—198°<sub>753</sub> (*B.* 36, 3692 *C.* 1903 [2] 1426; *Bl.* [3] 31, 755 *C.* 1904 [2] 303).
- 18)  $\delta$ -Phenyl- $\beta$ -Methyl- $\beta$ -Buten. Sd. 114°<sub>30</sub> (*B.* 37, 2313 *C.* 1904 [2] 216).
- 19)  $\beta$ -Phenyl- $\gamma$ -Methyl- $\alpha$ -Buten. Sd. 191—192°<sub>753</sub> (*B.* 36, 3691 *C.* 1903 [2] 1426).
- 20)  $\alpha$ -[4-Methylphenyl]- $\alpha$ -Buten. Sd. 210—212° (*B.* 36, 2237 *C.* 1903 [2] 438).
- 21)  $\alpha$ -[4-Aethylphenyl]propen. Sd. 216—218° (*B.* 36, 2236 *C.* 1903 [2] 438).
- 22)  $\alpha$ -[2,4-Dimethylphenyl]propen. Sd. 206—208° (*B.* 36, 2236 *C.* 1903 [2] 437).
- 23)  $\alpha$ -[3,4-Dimethylphenyl]propen. Sd. 224—226° (*B.* 36, 2236 *C.* 1903 [2] 437; *B.* 37, 1090 *Anm.* *C.* 1904 [1] 1260).
- $C_{11}H_{16}$  \*2) Isoamylbenzol. Sd. 198—199°<sub>757</sub> (*B.* 37, 2317 *C.* 1904 [2] 217).
- \*3) tert. Amylbenzol. Sd. 77°<sub>15</sub> (*A.* 327, 223 *C.* 1903 [1] 1408).
- \*4)  $\gamma$ -Phenylpentan. Sd. 187°<sub>753</sub> (*B.* 31, 3693 *C.* 1903 [2] 1427).
- \*12) 4-Isopropyl-1-Aethylbenzol. Sd. 196°<sub>753</sub> (*B.* 36, 1640 *C.* 1903 [2] 27).
- \*19) 5-Aethyl-1,2,4-Trimethylbenzol. Sd. 208°<sub>753</sub> (*B.* 36, 1642 *C.* 1903 [2] 27).
- \*20) 2-Aethyl-1,3,5-Trimethylbenzol. Sd. 207—208°<sub>755</sub> (*B.* 36, 1644 *C.* 1903 [2] 27; *B.* 37, 1717 *C.* 1904 [1] 1489).
- \*22)  $\alpha$ -Lauroil (*G.* 33 [1] 407 *C.* 1903 [2] 566).
- 33)  $\gamma$ -Phenyl- $\beta$ -Methylbutan. Sd. 188—189°<sub>753</sub> (*B.* 36, 3691 *C.* 1903 [2] 1426).

- $C_{11}H_{20}$  \*6)  $\beta$ -Undekin. Sd. 199—201° (B. 36, 2551 C. 1903 [2] 654).  
 13) Kohlenwasserstoff (aus 1-Oxy-1-Isoamylhexahydrobenzol). Sd. 194°<sub>780</sub> (C. r. 138, 1323 C. 1904 [2] 219; C. r. 139, 344 C. 1904 [2] 704).  
 $C_{11}H_{22}$  \*8)  $\beta$ -Undeken. Sd. 78,5°<sub>14</sub> (B. 36, 2548 C. 1903 [2] 654).

## — 11 II —

- $C_{11}H_5O_5$  C 60,5 — H 2,7 — O 36,7 — M. G. 218.  
 1) Purpurogallon. Sm. 262—264° (Soc. 83, 197 C. 1903 [1] 402, 640).  
 2) Isopurpurogallon (Soc. 83, 198 C. 1903 [1] 402, 640).  
 $C_{11}H_7N$  \*1) Nitril d. Naphtalin-1-Carbonsäure. Sm. 37—38°; Sd. 295—297° (B. 37, 2817 C. 1904 [2] 649).  
 $C_{11}H_8O_2$  \*4) Naphtalin-1-Carbonsäure (B. 37, 627 C. 1904 [1] 810).  
 $C_{11}H_8O_3$  \*2) 2-Phenyl-1,3-Diketo-2,3-Dihydroinden. Cu (B. 37, 3383 C. 1904 [2] 1219).  
 23) Phenylester d. Furan-2-Carbonsäure. Sm. 41,5° (B. 37, 2951 C. 1904 [2] 993).  
 $C_{11}H_8O_4$  \*17) Verbindung (aus d. Aldehyd d. 2-Brommethylfuran-5-Carbonsäure). Sm. 117° (C. 1903 [1] 421; Soc. 83, 187 C. 1903 [1] 421, 670).  
 23) 4-Keto-3-Acetyl-1,2-Benzpyron? Sm. 132° (D.R.P. 102746 C. 1899 [2] 408). — \*II, 1134.  
 24) Methylester d. 1,2-Benzpyron-6-Carbonsäure. Sm. 174° (B. 37, 196 C. 1904 [1] 661).  
 25) Acetat d. 4-Oxy-1,2-Benzpyron. Sm. 103° (B. 36, 465 C. 1903 [1] 636).  
 26) Verbindung (aus Phloroglucin u. Furfurol) (B. 35, 4443 C. 1903 [1] 422; B. 37, 315 C. 1904 [1] 697).  
 $C_{11}H_8O_5$  \*5) Purpurogallin. Sm. 274—275° u. Zers. K (Soc. 83, 194 C. 1903 [1] 639; Soc. 85, 245 C. 1904 [1] 798, 1005; C. 1904 [1] 927).  
 $C_{11}H_8O_6$  \*1)  $\alpha$ -[3,4-Dioxyphenyl]äthen-3,4-Methylenäther- $\beta\beta$ -Dicarbonsäure. Sm. 187—189°. Ca + 2½ H<sub>2</sub>O (C. 1904 [1] 880).  
 $C_{11}H_8N_2$  11) Nitril d. 2-Methylchinolin-3-Carbonsäure. Sm. 125—127° (J. pr. [2] 67, 507 C. 1903 [2] 252).  
 $C_{11}H_9N$  6) 2-Methylenamidonaphtalin. Sm. 62—64° (B. 35, 4167 C. 1903 [1] 172).  
 7) polym. 2-Methylenamidonaphtalin. Sm. 203° (B. 35, 4168 C. 1903 [1] 172).  
 $C_{11}H_9N_5$  2) 6-Amido-2-Phenylpurin (B. 37, 2271 C. 1904 [2] 199).  
 $C_{11}H_{10}O$  10)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Pentin. Sm. 8—10°; Sd. 137—138°<sub>16</sub> (C. r. 137, 796 C. 1904 [1] 43).  
 $C_{11}H_{10}O_2$  \*4)  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 166°. NH<sub>4</sub> (A. 336, 196 C. 1904 [2] 1731).  
 \*17) Aethylester d. Phenylpropionsäure. Sd. 151—152°<sub>12-13</sub> (Soc. 83, 1161 C. 1903 [2] 1370).  
 $C_{11}H_{10}O_3$  31) 7-Oxy-3-Aethyl-1,2-Benzpyron. Sm. 123—124° (B. 37, 2383 C. 1904 [2] 306).  
 32)  $\alpha\gamma$ -Lakton d.  $\beta\gamma$ -Dioxy- $\alpha$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure (Methyl- $\gamma$ -butyrolacton- $\alpha$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure). Sm. 178° (B. 36, 2255 C. 1903 [2] 437).  
 $C_{11}H_{10}O_4$  \*3) 5,7-Dioxy-1,2-Benzpyron (Citropten). Sm. 146 bis 147° (A. 242, 290 C. 1904 [2] 105).  
 \*16)  $\alpha$ -Phenylpropen- $\beta\gamma$ -Dicarbonsäure. Sm. 180° u. Zers. (M. 24, 367 C. 1903 [2] 496).  
 \*21) cis-1-Phenyl-R-Trimethylen-trans-2,3-Dicarbonsäure. Sm. 175° (J. pr. [2] 68, 163 C. 1903 [2] 760; B. 36, 3780 C. 1904 [1] 42).  
 \*33) r-Phenylisoparakonsäure. Sm. 170°. Ba (A. 330, 329, 332 C. 1904 [1] 928).  
 \*39) d-Phenylparakonsäure + ¼ H<sub>2</sub>O. Sm. 134° (wasserfrei) (A. 330, 347 C. 1904 [1] 929).  
 \*40) l-Phenylparakonsäure + ¼ H<sub>2</sub>O. Sm. 134° (wasserfrei) (A. 330, 347 C. 1904 [1] 929).  
 \*43) Methylester d.  $\alpha\gamma$ -Diketo- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure (Ph. Ch. 23, 311). — \*II, 1074.  
 44) Dimethyläther d. 7,8-Dioxy-1,4-Benzpyron + H<sub>2</sub>O. Sm. 124° (wasserfrei) (B. 36, 128 C. 1903 [1] 468).

- $C_{11}H_{10}O_4$  45)  $\alpha$ -[3,4-Dioxyphenyl]äthin-3,4-Dimethyläther- $\beta$ -Carbonsäure (3,4-Dimethoxyphenylpropionsäure). Sm. 149° u. Zers. (C. 1903 [1] 580; Soc. 85, 165 C. 1904 [1] 724).
- 46) cis-1-Phenyl-R-Trimethylen-cis-trans-2,3-Dicarbonsäure. Sm. 121° (B. 36, 3782 C. 1904 [1] 42).
- 47) d-Phenylisoparakonsäure. Sm. 182° (A. 330, 339 C. 1904 [1] 929).
- 48) l-Phenylisoparakonsäure. Sm. 182° (A. 330, 339 C. 1904 [1] 929).
- $C_{11}H_{10}O_5$  18)  $\alpha$ -[4-Oxyphenyl]äthenmethyläther- $\beta\beta$ -Dicarbonsäure. Sm. 185 bis 190° (B. 31, 2607). — \*II, 1131.
- 19) Dimethylester d. Benzol-1-Carbonsäure-2-Ketocarbonsäure. Sm. 66 bis 68° (M. 24, 922 C. 1904 [1] 514).
- $C_{11}H_{10}O_6$  14)  $\alpha$ -[3,4-Dioxyphenyl]äthan-3,4-Methylenäther- $\beta\beta$ -Dicarbonsäure. Sm. 142—143° u. Zers. Ca +  $\frac{1}{2}H_2O$ , Ba +  $3H_2O$  (C. 1904 [1] 879).
- 15)  $\alpha$ -Phenyläthan- $\beta$ ,2,4-Tricarbonsäure. Sm. 265—266° (A. 293, 171). — \*II, 1171.
- $C_{11}H_{10}N_2$  13) 3-Methyl-6-Phenyl-1,2-Diazin. Sm. 104—105°; Sd. 185°<sub>10-20</sub>. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Chromat (B. 36, 492 C. 1903 [1] 653).
- $C_{11}H_{11}N$  \*6) 1-[4-Methylphenyl]pyrrol. Sm. 82°; Sd. 252°<sub>729.5</sub> (B. 37, 2795 C. 1904 [2] 531).
- \*15) 2,4-Dimethylchinolin (B. 37, 1325 C. 1904 [1] 1359).
- 32) 1-[2-Methylphenyl]pyrrol. Sd. 246° (B. 37, 2795 C. 1904 [2] 531).
- 33) 2-[2-Methylphenyl]pyrrol. Sd. 284° (B. 37, 2796 C. 1904 [2] 531).
- 34) 2-[4-Methylphenyl]pyrrol. Sm. 153°; Sd. 294° (B. 37, 2796 C. 1904 [2] 531).
- $C_{11}H_{12}O$  17) 2,2-Dimethyl-1,2-Benzpyran. Sd. 97°<sub>14</sub> (B. 37, 494 C. 1904 [1] 805).
- $C_{11}H_{12}O_2$  \*2) Methyläther d.  $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten. +  $2H_3PO_4$ , + Chloressigsäure (C. 1903 [2] 284).
- \*3)  $\alpha\gamma$ -Diketo- $\alpha$ -Phenylpentan. Sd. 150—155°<sub>18</sub>. Cu (C. r. 139, 209 C. 1904 [2] 649).
- \*28) Aethylester d.  $\beta$ -Phenylakrylsäure. 3 + SbCl<sub>3</sub>, + FeCl<sub>3</sub>, 2 + SnCl<sub>4</sub> (B. 37, 3667 C. 1904 [2] 1569).
- \*31)  $\beta$ -[2,4-Dimethylphenyl]akrylsäure. Sm. 176—177°. Ag (C. 34 [2] 116 C. 1904 [2] 1214).
- 34)  $\gamma$ -Keto- $\alpha$ -[6-Oxy-3-Methylphenyl]- $\alpha$ -Buten. Sm. 128—129° (B. 37, 3186 C. 1904 [2] 991).
- 35) Dimethyl-m-Biscyklohexanon. Sm. 125—127° (B. 36, 2162 C. 1903 [2] 370).
- 36)  $\beta$ -[4-Methylphenyl]propen- $\alpha$ -Carbonsäure. Sm. 136° (C. r. 138, 986 Anm. C. 1904 [1] 1439).
- 37)  $\beta$ -[2,5-Dimethylphenyl]akrylsäure. Sm. 129—130°. Na, Ca, Ag (C. 34 [2] 116 C. 1904 [2] 1214).
- 38) Methyl ester d.  $\beta$ -Phenylpropen- $\alpha$ -Carbonsäure. Sm. 28°; Sd. 259 bis 260° (C. r. 138, 987 C. 1904 [1] 1439).
- 39) polym. Aethylester d.  $\beta$ -Phenylakrylsäure (B. 35, 4152 C. 1903 [1] 159).
- $C_{11}H_{12}O_3$  \*1) 5-Oxy-2,4-Diacetyl-1-Methylbenzol. Sm. 106° (B. 36, 2162 C. 1903 [2] 370).
- 63) 3,4-Methylenäther-5-Methyläther d. 3,4,5-Trioxy-1-Allylbenzol (Myristicin). Sd. 149,5°<sub>16</sub> (B. 36, 3446 C. 1903 [2] 1176).
- 64) 3,4-Methylenäther-5-Methyläther d. 3,4,5-Trioxy-1-Propenylbenzol (Isomyristicin). Sm. 44—45° (30,2°); Sd. 142—149°<sub>10</sub> (B. 23, 1806; B. 36, 3447 C. 1903 [2] 1176; B. 36, 3454 C. 1903 [2] 1177). — III, 638; \*III, 468.
- 65)  $\beta$ -Oxy- $\beta$ -Phenylakrylälthyläthersäure. Sm. 160° u. Zers. (C. r. 138, 287 C. 1904 [1] 719).
- 66) Methyl ester d.  $\beta$ -Oxy- $\beta$ -Phenylakrylmethyläthersäure. Sd. 154 bis 155°<sub>14</sub> (C. r. 137, 261 C. 1903 [2] 664; C. r. 138, 208 C. 1904 [1] 659; Bl. [3] 31, 515 C. 1904 [1] 1602).
- 67) Acetat d.  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha$ -Phenylpropan. Sd. 165—170°<sub>40</sub> (C. 33 [2] 261 C. 1904 [1] 24).
- 68) Acetat d.  $\beta$ -Oxyäthylphenylketon. Sm. 54° (B. 36, 1354 C. 1903 [1] 1299).

- $C_{11}H_{12}O_4$  \*1) 3,5-Diacetyl-2,6-Dimethyl-1,4-Pyron. Sm. 124°; Sd. oberh. 300° (Soc. 85, 977 C. 1904 [2] 711).
- \*15) isom.  $\beta$ -[2,4-Dioxyphenyl]akryl-2,4-Dimethyläthersäure. Sm. 184° (C. 1903 [1] 580; Soc. 85, 162 C. 1904 [1] 724).
- \*17)  $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Dimethyläthersäure (C. 1903 [1] 580; Soc. 85, 163 C. 1904 [1] 724).
- \*24)  $\alpha$ -Phenylpropan- $\gamma$ ,2-Dicarbonsäure. Sm. 122° (138°) (Soc. 83, 249 C. 1903 [1] 586, 882).
- \*47) 2-Aethylester d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 107—108° (M. 24, 949 C. 1904 [1] 916).
- 64) 3,5-Dioxy-2,4-Diacetyl-1-Methylbenzol. Sm. 95° (G. 34 [2] 977 C. 1904 [2] 711).
- 65)  $\beta$ -Methyläther-3,4-Methylenäther d.  $\alpha$ -Keto- $\beta$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]propen. Sd. 173—174° (i. V.) (A. 332, 334 C. 1904 [2] 652).
- 66) 4-Oxy-3,5-Diacetyl-5-Methyl-2-Methylen-1,2-Pyran. Sm. 75° (G. 34 [2] 979 C. 1904 [2] 711).
- 67) 1,3,5-Trimethylbenzol-2,4-Dicarbonsäure. Sm. 283° u. Zers. — \*II, 1072.
- 68) 5-Oxy-1-Methylbenzyläthyläther-2-Ketocarbonsäure +  $H_2O$ . Sm. 78° (C. 1904 [1] 1597).
- 69) 3-Oxy-1-Methylbenzyläthyläther-4-Ketocarbonsäure. Sm. 144° (C. 1904 [1] 1597).
- 70) 1-Methylen-2-Methyl-R-Penten-5-Carbonsäure-4-[Aethyl- $\beta$ -Carbonsäure]. Sm. 187° (B. 36, 951 C. 1903 [1] 1022).
- 71) Porinsäure +  $H_2O$ . Sm. 218° (wasserfrei) (J. pr. [2] 68, 64 C. 1903 [2] 513).
- 72)  $\alpha$ -[6-Aldehydo-3-Methylphenoxy]propionsäure. Sm. 114—115° (A. 312, 287). — \*III, 65.
- 73)  $\alpha$ -Methylester d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 102° (M. 24, 425 C. 1903 [2] 622).
- 74)  $\beta$ -Methylester d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 92° (M. 24, 425 C. 1903 [2] 623).
- 75) Dimethylester d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 39—42°; Sd. 173—176°<sub>28</sub> (M. 24, 939 C. 1904 [1] 515).
- 76) 1-Aethylester d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 111—113° (M. 24, 950 C. 1904 [1] 916).
- 77) Monobenzylester d. Bernsteinsäure. Sm. 59° (B. 35, 4077 C. 1903 [1] 74).
- 78) Verbindung (aus Ceropten). Sm. 52° (C. 1904 [1] 40).
- $C_{11}H_{12}O_5$  \*3)  $\beta$ -[4-Oxy-3,5-Dimethoxyphenyl]akrylsäure. Sm. 192° (B. 36, 1032 C. 1903 [1] 1223).
- 43) 1,3-Diacetat d. 1,2,3-Trioxybenzol-2-Methyläther. Sm. 51—54° (M. 25, 814 C. 1904 [2] 1119).
- 44) 2,3-Diacetat d. 1,2,3-Trioxybenzol-1-Methyläther. Sm. 91—93° (M. 25, 508 C. 1904 [2] 1118; M. 25, 812 C. 1904 [2] 1119).
- $C_{11}H_{12}O_6$  \*10) Diäthylester d. Chelidonsäure. 2 +  $HgCl_2$ , 4 + 3  $HgCl_2$ , +  $C_2H_5ONa$  (B. 37, 3737 C. 1904 [2] 1537; B. 37, 3751 C. 1904 [2] 1539).
- 16) Carminsäure. K, Ba (Soc. 83, 138 1903 [1] 89, 466).
- 17) Homomaticosäure. Sm. 96°. Ba +  $H_2O$  (B. 35, 4356 C. 1903 [1] 331).
- 18) Oxyssäure (aus Phenylisoparakonsäure). Ba (A. 330, 331 C. 1904 [1] 928).
- $C_{11}H_{12}O_7$  \*8) 3,4-Dioxybenzoldimethyläther-1-Carbonsäure-2-Oxyessigsäure. Sm. 215—217° (B. 36, 2319 C. 1903 [2] 443; M. 25, 891 C. 1904 [2] 1313).
- $C_{11}H_{12}N_2$  \*2) 3,4-Dimethyl-1-Phenylpyrazol. Sd. 277—278° (A. 331, 240 C. 1904 [1] 1221).
- \*7) 6-Methyl-1-Phenyl-1,4-Dihydro-1,2-Diazin. Sm. 196—197° (B. 36, 1934 Anm. C. 1903 [2] 189).
- $C_{11}H_{12}N_4$  6) Nitril d. 2-Methyl-1,4-Phenylendi[Amidoessigsäure]. Sm. 100—103° (D.R.P. 145062 C. 1903 [2] 1037).
- $C_{11}H_{12}Br_4$  1) 2,3,5,6-Tetrabrom-4-Isopropyl-1-Aethylbenzol. Sm. 246° (B. 36, 1640 C. 1903 [2] 27).
- $C_{11}H_{16}N$  \*28) 1,2,5-Trimethylindol. Sm. 56—57° (D.R.P. 137117 C. 1903 [1] 110).
- 29) polym. 6-Methylenamido-1,2,3,4-Tetrahydronaphtalin. Sm. 164° u. Zers. (Soc. 85, 734 C. 1904 [2] 116, 339).

- $C_{11}H_{13}N_3$  10) 3-Imido-2,5-Dimethyl-1-Phenyl-2,3-Dihydropyrazol. Pikrat (*B.* 36, 3290 *C.* 1903 [2] 1191).
- 11) 3-Imido-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Salze siehe (*B.* 36, 3282 *C.* 1903 [2] 1189).
- $C_{11}H_{14}O$  \*5) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten. Sd. 135—136°<sub>26</sub> (*B.* 37, 3998 *C.* 1904 [2] 1641).
- \*6) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -Methylpropen. Sm. 8—9°; Sd. 123°<sub>17</sub> (*B.* 37, 4000 *C.* 1904 [2] 1641).
- \*9) Aethyläther d. 4-Oxy-1-Allylbenzol. Sd. 224°<sub>750</sub> (*D. R. P.* 154654 *C.* 1904 [2] 1355).
- \*20) Methyl-2,4,5-Trimethylphenylketon. +  $H_2SO_4$  (*R.* 21, 355 *C.* 1903 [1] 151).
- \*29) Aethyläther d.  $\alpha$ -[4-Oxyphenyl]propen. Sm. 61°; Sd. 241°<sub>750</sub> (*D. R. P.* 154654 *C.* 1904 [2] 1355).
- 34)  $\gamma$ -[2-Oxyphenyl]- $\beta$ -Penten. Sd. 215—216°<sub>753</sub> u. Zers. (*Bl.* [3] 29, 353 *C.* 1903 [1] 1222).
- 35) Methyläther d.  $\alpha$ -[3-Oxyphenyl]- $\alpha$ -Buten. Sd. 128—129°<sub>16</sub> (*B.* 37, 3999 *C.* 1904 [2] 1641).
- 36) Methyläther d.  $\beta$ -[4-Oxyphenyl]- $\beta$ -Buten. Sd. 233—236°<sub>760</sub> (*B.* 37, 3997 *C.* 1904 [2] 1641).
- 37) Methyläther d.  $\alpha$ -[4-Oxy-2-Methylphenyl]propen. Sd. 119—121°<sub>13</sub> (*B.* 37, 3994 *C.* 1904 [2] 1640).
- 38) Methyläther d.  $\alpha$ -[4-Oxy-3-Methylphenyl]propen. Sd. 121—123°<sub>14</sub> (*B.* 37, 3992 *C.* 1904 [2] 1640).
- 39) Methyläther d.  $\alpha$ -[6-Oxy-3-Methylphenyl]propen. Sd. 122—124°<sub>17</sub> (*B.* 37, 3995 *C.* 1904 [2] 1640).
- 40) Aethyläther d.  $\alpha$ -[2-Oxyphenyl]propen. Sd. 230—231°<sub>757</sub> (*B.* 37, 3987 *C.* 1904 [2] 1639).
- 41) Aethyläther d.  $\alpha$ -[3-Oxyphenyl]propen. Sd. 124—125°<sub>16</sub> (*B.* 37, 3990 *C.* 1904 [2] 1639).
- 42) Propyläther d.  $\beta$ -Oxy- $\alpha$ -Phenyläthen. Sd. 238—241° (*C. r.* 138, 288 *C.* 1904 [1] 720; *Bl.* [3] 31, 528 *C.* 1904 [1] 1552).
- 43) Aldehyd d. 1-Pseudobutyl-3-Carbonsäure (*B.* 32, 2533). — \*III, 44.
- $C_{11}H_{14}O_2$  \*2) Dimethyläther d. 3,4-Dioxy-1-Allylbenzol (*J. pr.* [2] 68, 246 *C.* 1903 [2] 1063).
- \*4) Dimethyläther d. 3,4-Dioxy-1-Propenylbenzol. Pikrat (*C.* 1904 [2] 954).
- \*26) 1-Pseudobutylbenzol-4-Carbonsäure. Sm. 164° (*Bl.* [3] 31, 969 *C.* 1904 [2] 1112).
- \*55) Isobutyl-4-Oxyphenylketon. Sm. 97—98° (*B.* 36, 3891 *C.* 1904 [1] 93).
- \*56) Propyl-6-Oxy-3-Methylphenylketon. Sm. 34° (*B.* 36, 3892 *C.* 1904 [1] 93).
- 67) Dimethyläther d.  $\alpha$ -[2,5-Dioxyphenyl]propen. Sd. 132—135°<sub>14</sub> (*B.* 36, 858 *C.* 1903 [1] 1084).
- 68) Dimethyläther d.  $\beta$ -[2,5-Dioxyphenyl]propen. Sd. 124—125°<sub>15</sub> (*B.* 37, 3997 *C.* 1904 [2] 1641).
- 69) Dimethyläther d.  $\beta$ -[3,4-Dioxyphenyl]propen. Sd. 253—254° (*C. r.* 139, 140 *C.* 1904 [2] 593).
- 70) Methyläther d.  $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]butan. Sd. 160°<sub>22</sub> (*A.* 330, 236 *C.* 1904 [1] 945).
- 71) Methyläther d. Aethyl-4-Oxy-2-Methylphenylketon. Sm. 43°; Sd. 149—150°<sub>14</sub> (*B.* 37, 3993 *C.* 1904 [2] 1640).
- 72) Methyläther d. Aethyl-4-Oxy-3-Methylphenylketon. Sm. 41°; Sd. 169—171°<sub>25</sub> (*B.* 37, 3991 *C.* 1904 [2] 1640).
- 73) Methyläther d. Aethyl-6-Oxy-3-Methylphenylketon. Sd. 149—151°<sub>17</sub> (*B.* 37, 3994 *C.* 1904 [2] 1640).
- 74) Aethyläther d. Methyl-4-Oxy-2-Methylphenylketon. Sm. 22°; Sd. 195°<sub>81</sub> (*C.* 1904 [1] 1597).
- 75) Aethyläther d. Methyl-2-Oxy-4-Methylphenylketon. Sm. 71°; Sd. 140°<sub>10</sub> (*C.* 1904 [1] 1597).
- 76)  $\gamma$ -Phenylvaleriansäure. Sm. 13°; Sd. 210°<sub>85</sub>. Ca, Al (*C.* 1904 [1] 1416).
- 77) Aethylester d. 3-Methylnorcaradiencarbonsäure. Sd. 122—126°<sub>15</sub> (*B.* 36, 3514 *C.* 1903 [2] 1275).

- $C_{11}H_{14}O_2$  78) Acetat d. 2-Oxymethyl-1,4-Dimethylbenzol. *Sd.* 242—243° (*G.* 32 [2] 485 *C.* 1903 [1] 831).
- $C_{11}H_{14}O_3$  79) 3,4-Methylenäther-5-Methyläther d. 3,4,5-Trioxy-1-Propylbenzol (Dihydromyristicin). *Sd.* 149—150°<sub>17</sub> (*B.* 36, 3449 *C.* 1903 [2] 1176).
- 80) 1-Keto-2,4-Diacetyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. *Sm.* 75° (*B.* 36, 2159 *C.* 1903 [2] 370).
- 81) Dimethyläther d.  $\alpha$ -Keto- $\beta$ -Oxy- $\alpha$ -[4-Oxyphenyl]propan. *Sd.* 160° (*A.* 332, 329 *C.* 1904 [2] 651).
- 82) Dimethyläther d.  $\beta$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]propan. *Sd.* 195 bis 200°<sub>11</sub> (*A.* 332, 336 *C.* 1904 [2] 652).
- 83)  $\delta$ -Phenyl- $\beta$ -Methylbutan- $\beta\gamma$ -Ozonid. *Fl.* (*B.* 37, 845 *C.* 1904 [1] 1144).
- 84)  $\beta$ -Oxy- $\beta$ -Phenylvaleriansäure. *Sm.* 118—121°. *Ca*, *Ba* (*C.* 1904 [1] 1343).
- 85) Aldehyd d. 3,4-Dioxybenzol-3-Isobutyläther-1-Carbonsäure. *Sm.* 94° (*D.R.P.* 85196). — \*III, 74.
- 86) Aethylester d.  $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. *Sd.* 126°<sub>15</sub> (*B.* 37, 1268 *C.* 1904 [1] 1334).
- $C_{11}H_{14}O_4$  \*11) 2,4-Dioxybenzoldiäthyläther-1-Carbonsäure. *Sm.* 99—102° (*M.* 24, 893 *C.* 1904 [1] 512).
- \*23) Aethylester d. 2,4-Dioxybenzol-4-Aethyläther-1-Carbonsäure. *Sm.* 53—54° (*M.* 24, 890 *C.* 1904 [1] 512).
- 33) Isobutyl-2,3,4-Trioxyphenylketon. *Sm.* 108° (*D.R.P.* 49149, 50451). — \*III, 122.
- 34) Propyl-2,4,6-Trioxy-3-Methylphenylketon. *Sm.* 161—162° (*A.* 329, 318 *C.* 1904 [1] 799).
- 35) Trimethyläther d. 2,3,4-Trioxyphenylketon. *Sd.* 174°<sub>10</sub> (*B.* 36, 2191 *C.* 1903 [2] 384).
- 36)  $\beta\beta$ -Dioxy- $\beta$ -Phenylpropiondimethyläthersäure. *Zers.* bei 95°.  $Na + 5H_2O$  (*C. r.* 137, 261 *C.* 1903 [2] 664).
- 37) Methylester d. 3,5-Dioxy-1-Methylbenzoldimethyläther-2-Carbonsäure. *Sm.* 80—84° (*M.* 24, 896 *C.* 1904 [1] 512).
- 38) Methylester d. 3,5-Dioxy-1-Methylbenzoldimethyläther-4-Carbonsäure. *Sm.* 31—37° (*M.* 24, 900 *C.* 1904 [1] 513).
- 39) Methylester d. Säure  $C_{10}H_{12}O_4$ . *Sm.* 115—117° (*M.* 24, 913 *C.* 1904 [1] 513).
- 40) Aethylester d.  $\alpha$ -Oxy- $\alpha$ -[4-Methoxyphenyl]essigsäure. *Sm.* 47 bis 48° (*B.* 37, 3173 *C.* 1904 [2] 1303).
- 41) Aethylester d. 2,4-Dioxybenzoldimethyläther-1-Carbonsäure. *Sd.* 170°<sub>18</sub> (*C.* 1903 [1] 580; *Soc.* 85, 160 *C.* 1904 [1] 724).
- 42) 2-Oxybenzoat d.  $\alpha\alpha$ -Dioxyäthan- $\alpha$ -Aethyläther (Aethoxyäthyliden-salicylat). *Fl.* (*D.R.P.* 146849 *C.* 1903 [2] 1353).
- $C_{11}H_{14}O_5$  \*4) Methylester d. 3,4,5-Trioxybenzoltrimethyläther-1-Carbonsäure. *Sm.* 80—82° (*M.* 25, 511 *C.* 1904 [2] 1118).
- \*13) Methylester d. 2,4,6-Trioxybenzoltrimethyläther-1-Carbonsäure. *Sm.* 67—70° (*M.* 24, 874 *C.* 1904 [1] 368).
- 14) 2,4,6-Trioxy-1,3-Dimethylbenzol-2,4-Dimethyläther-5-Carbonsäure. *Sm.* 125° (*M.* 24, 114 *C.* 1903 [1] 967).
- 15) Aethylester d. 5-Oxy-1,4-Pyronisopropyläther-2-Carbonsäure (*Ae.* d. Komenisopropyläthersäure). *Sm.* 123° (*G.* 33 [2] 266 *C.* 1904 [1] 45).
- 16) Diäthylester d.  $\gamma$ -Keto- $\alpha\delta$ -Pentadien- $\alpha\epsilon$ -Dicarbonsäure. *Sm.* 49,5 bis 50° (*B.* 37, 3296 *C.* 1904 [2] 1041).
- $C_{11}H_{14}O_7$  \*1) Diäthylester d. Acetondioxalsäure. *Sm.* 104° (*B.* 37, 3734 *C.* 1904 [2] 1537).
- 3) Diäthylester d.  $\alpha\epsilon$ -Dioxy- $\gamma$ -Keto- $\alpha\delta$ -Pentadien- $\alpha\epsilon$ -Dicarbonsäure. *Sm.* 97,5—98,5°. *Na*<sub>2</sub>, *Ba* (*B.* 37, 3735 *C.* 1904 [2] 1537).
- $C_{11}H_{14}Br_2$  \*3)  $\alpha\beta$ -Dibromisoamylbenzol. *Sm.* 128° (*B.* 37, 1088 *C.* 1904 [1] 1260; *B.* 37, 2316 *C.* 1904 [2] 217).
- \*8) 4,6-Dibrom-2-Aethyl-1,3,5-Trimethylbenzol. *Sm.* 59—60° (*B.* 37, 1718 *C.* 1904 [1] 1489).
- \*10)  $\beta\gamma$ -Dibromisoamylbenzol. *Sm.* 66° (*B.* 37, 2315 *C.* 1904 [2] 217).
- 11)  $\gamma\delta$ -Dibrom- $\gamma$ -Phenyl- $\beta$ -Methylbutan. *Fl.* (*B.* 36, 3691 *C.* 1903 [2] 1426).

- $C_{11}H_{14}Br_2$  12)  $\alpha\beta$ -Dibrom- $\alpha$ -[2,5-Dimethylphenyl]propan. *Sd.* 163—166°<sub>17</sub> (*B.* 36, 773 *C.* 1903 [1] 834).
- 13) 4-[ $\alpha\beta$ -Dibrompropyl]-1,3-Dimethylbenzol. *Sd.* 151—153° (*B.* 36, 2236 *C.* 1903 [2] 437).
- $C_{11}H_{15}N$  \*7) 1-Phenylhexahydropyridin. *Sd.* 257—258°<sub>752</sub>. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*B.* 37, 3212 *C.* 1904 [2] 1238).
- \*12) 1-Aethyl-1,2,3,4-Tetrahydrochinolin. *Pikrat* (*B.* 36, 2572 *C.* 1903 [2] 727).
- 33)  $\alpha$ -[4-Dimethylamidophenyl]propen. *Sm.* 48° (*B.* 37, 1742 *C.* 1904 [1] 1599).
- 34) Methylallyl-2-Methylphenylamin. *Sd.* 215—220°. *Pikrat* (*B.* 37, 3897 *C.* 1904 [2] 1612).
- 35) 4-Methylallylamido-1-Methylbenzol(Methylallyl-4-Methylphenylamin). *Sd.* 230—232°. *Pikrat* (*B.* 37, 2719 *C.* 1904 [2] 592).
- 36) 6-Methylamido-1,2,3,4-Tetrahydronaphtalin. *Sd.* 267,5°<sub>210</sub>. HCl, HNO<sub>3</sub> (*Soc.* 85, 735 *C.* 1904 [2] 117, 339).
- 37) 1,8-Dimethyl-1,2,3,4-Tetrahydrochinolin. *Sd.* 238—240°. (2HCl, PtCl<sub>4</sub>), *Pikrat* (*B.* 37, 22 *C.* 1904 [1] 522).
- 38)  $\alpha$ -Cytisolidin. *Fl.* (2HCl, PtCl<sub>4</sub>) (*B.* 37, 20 *C.* 1904 [1] 522).
- 39)  $\beta$ -Cytisolidin. (2HCl, PtCl<sub>4</sub>) (*B.* 37, 21 *C.* 1904 [1] 522).
- $C_{11}H_{16}Cl$  6)  $\gamma$ -Chlor- $\gamma$ -Phenylpentan. *Fl.* (*B.* 36, 3692 *C.* 1903 [2] 1426).
- 7)  $\gamma$ -Chlor- $\gamma$ -Phenyl- $\beta$ -Methylbutan. *Fl.* (*B.* 36, 3691 *C.* 1903 [2] 1426).
- $C_{11}H_{16}O$  \*3) 4-Oxy-1-tert. Amylbenzol (*A.* 327, 207 *C.* 1903 [1] 1407; *A.* 327, 219 *C.* 1903 [1] 1408).
- \*25) Isoamyläther d. Oxybenzol. *Sd.* 215—220° (*B.* 36, 2062 *C.* 1903 [2] 357).
- \*31)  $\delta$ -Oxy- $\delta$ -Phenyl- $\beta$ -Methylbutan. *Sd.* 126°<sub>11</sub> (*B.* 37, 2316 *C.* 1904 [2] 217).
- 33)  $\gamma$ -Oxy- $\gamma$ -Phenylpentan. *Sd.* 125—127°<sub>10</sub> (223—224°<sub>762</sub>). *Mg* + (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>O (*C. r.* 137, 758 *C.* 1903 [2] 1415; *B.* 36, 3692 *C.* 1903 [2] 1426; *C. r.* 138, 154 *C.* 1904 [1] 577).
- 34)  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Methylbutan. *Sd.* 235—238° u. *Zers.* (*C.* 1904 [1] 1496).
- 35)  $\gamma$ -Oxy- $\gamma$ -Phenyl- $\beta$ -Methylbutan. *Sd.* 196—198°<sub>760</sub> (*B.* 36, 3691 *C.* 1903 [2] 1426).
- 36)  $\beta$ -Oxy- $\delta$ -Phenyl- $\beta$ -Methylbutan. *Sd.* 121°<sub>13</sub> (*B.* 37, 2314 *C.* 1904 [2] 217).
- 37) Methyläther d.  $\alpha$ -[3-Oxyphenyl]butan. *Sd.* 115—116°<sub>10</sub> (*B.* 37, 4000 *C.* 1904 [2] 1641).
- 38) Methyläther d.  $\alpha$ -[4-Oxyphenyl]butan. *Sd.* 120°<sub>19</sub> (*B.* 37, 3999 *C.* 1904 [2] 1641).
- 39) Methyläther d.  $\beta$ -[4-Oxyphenyl]butan. *Sd.* 106—108°<sub>18</sub> (*B.* 37, 3997 *C.* 1904 [2] 1641).
- 40) Methyläther d. 4-Oxy-3-Propyl-1-Methylbenzol. *Sd.* 216—218° (*B.* 37, 3995 *C.* 1904 [2] 1640).
- 41) Methyläther d. 6-Oxy-3-Propyl-1-Methylbenzol. *Sd.* 222° (*B.* 37, 3993 *C.* 1904 [2] 1640).
- 42) Aethyläther d. 2-Oxy-1-Propylbenzol. *Sd.* 213°<sub>754</sub> (*B.* 37, 3989 *C.* 1904 [2] 1639).
- 43) Aethyläther d. 3-Oxy-1-Propylbenzol. *Sd.* 220—224°<sub>753</sub> (*B.* 37, 3990 *C.* 1904 [2] 1639).
- 44) Aethyläther d. 4-Oxy-1-Propylbenzol. *Sd.* 108—110°<sub>13</sub> (*B.* 37, 3990 *C.* 1904 [2] 1639).
- 45) Methylenecampher. *Sm.* 30—35°; *Sd.* 218° (*C. r.* 136, 752 *C.* 1903 [1] 971; *C. r.* 136, 1223 *C.* 1903 [2] 116).
- $C_{11}H_{16}O_2$  \*6) Dimethyläther d. 3,4-Dioxy-1-Propylbenzol. *Sd.* 246—247° (*B.* 36, 860 *C.* 1903 [1] 1085).
- \*9) Diäthyläther d. Dioxymethylbenzol. *Sd.* 220—222° (*B.* 37, 188 *C.* 1904 [1] 638).
- \*19) Oxymethylenecampher. *Sm.* 79°; *Sd.* 105°<sub>11</sub>. Na, Ca, Cu (*C. r.* 136, 1223 *C.* 1903 [2] 116; *B.* 36, 2635 *C.* 1903 [2] 626; *B.* 36, 4287 *C.* 1904 [1] 458; *B.* 37, 762 *C.* 1904 [1] 1085; *B.* 37, 2070 *C.* 1904 [2] 17; *B.* 37, 2180 *C.* 1904 [2] 223).

- $C_{11}H_{16}O_2$  \*24) Aethylester d.  $\alpha$ -Camphylsäure. Sd.  $132^\circ_{70}$  (Soc. 83, 850 C. 1903 [2] 572).  
 33)  $\gamma$ -Oxy- $\gamma$ -[2-Oxyphenyl]pentan. Sm.  $57^\circ$  (Bl. [3] 29, 351 C. 1903 [1] 1222).  
 34) 3-Methyläther d.  $\alpha$ -Oxy- $\alpha$ -[3-Oxyphenyl]butan. Sd.  $151$ — $152^\circ_{15}$  (B. 37, 3999 C. 1904 [2] 1641).  
 35) 5-Methyläther d. 5-Oxy-2-[ $\alpha$ -Oxypropyl]-1-Methylbenzol. Sd. 149 bis  $151^\circ_{18}$  (B. 37, 3993 C. 1904 [2] 1640).  
 36) 4-Methyläther d. 4-Oxy-3-[ $\alpha$ -Oxypropyl]-1-Methylbenzol. Sd. 153 bis  $154^\circ_{22}$  (B. 37, 3995 C. 1904 [2] 1640).  
 37) 6-Methyläther d. 6-Oxy-3-[ $\alpha$ -Oxypropyl]-1-Methylbenzol. Sd.  $157^\circ_{20}$  (B. 37, 3991 C. 1904 [2] 1640).  
 38) Dimethyläther d. 2,5-Dioxy-1-Propylbenzol. Sd.  $240^\circ_{70}$  (B. 36, 857 C. 1903 [1] 1084).  
 39) Dimethyläther d. 2,5-Dioxy-1-Isopropylbenzol. Sd.  $114$ — $116^\circ_{15}$  (B. 37, 3997 C. 1904 [2] 1641).  
 40) Dimethyläther d. 3,5-Dioxy-1-Propylbenzol. Sd.  $136$ — $137^\circ_{18}$  (B. 36, 3450 C. 1903 [2] 1176).  
 41) 2-Aethyläther d. 2-Oxy-1-[ $\alpha$ -Oxypropyl]benzol. Sd.  $129$ — $130^\circ_{15}$  (B. 37, 3988 C. 1904 [2] 1639).  
 42) Oxymethylenisothujon. Sd.  $128$ — $132^\circ_{13}$  (A. 329, 126 C. 1903 [2] 1323).  
 43) 2,4-Diketo-1,1,3,3,5-Pentamethyl-1,2,3,4-Tetrahydrobenzol. Sm.  $59$ — $62^\circ$  (M. 24, 911 C. 1904 [1] 513).  
 44)  $\beta$ -Metacopaivasäure (oder  $C_{16}H_{24}O_{11}$ ). Sm.  $89$ — $90^\circ$  (Ar. 239, 555). — \*III, 419.
- $C_{11}H_{16}O_3$  \*2) 2,5-Dimethyläther d. 2,3,5-Trioxy-1-Propylbenzol. Sd. 149,5 bis  $151^\circ_{12}$  (B. 36, 1718 C. 1903 [2] 114).  
 \*6) Camphocarbonsäure. Sm.  $126$ — $127^\circ$  ( $129^\circ$ ) (B. 36, 208 C. 1903 [1] 515; B. 36, 669 C. 1903 [1] 771; B. 36, 1305 C. 1903 [1] 1224; B. 36, 2622 C. 1903 [2] 624; B. 36, 4289 C. 1904 [1] 456; B. 37, 2512 C. 1904 [2] 332).  
 18) 2,5-Dimethyläther d. 2,5-Dioxy-1-[ $\alpha$ -Oxyisopropyl]benzol. Sd.  $138$ — $141^\circ_{18}$  (B. 37, 3996 C. 1904 [2] 1641).  
 19) Trimethyläther d. 2,4,6-Trioxy-1,3-Dimethylbenzol. Sm.  $61^\circ$  (M. 24, 108 C. 1903 [1] 967).  
 20) 3-Aethyläther d. 2,3,5-Trioxy-1-Propylbenzol. Sm.  $143^\circ$  (B. 36, 1720 C. 1903 [2] 114).  
 21) Säure (aus Carvon). Sm.  $96$ — $97^\circ$  (C. 1904 [1] 1082).  
 22) Säure (aus Carvon). Sm.  $137^\circ$  (C. 1904 [1] 1082).  
 23) Methylester d. 3-Keto-1-Methyl-2-Allyl-R-Pentamethylen-2-Carbonsäure. Sd.  $114$ — $115^\circ_{15}$  (C. r. 138, 210 C. 1904 [1] 663).
- $C_{11}H_{16}O_4$  \*2) 3,4-Dimethyläther d. i-3,4-Dioxy-1-[ $\alpha$ - $\beta$ -Dioxypropyl]benzol. Sm.  $120$ — $121^\circ$  (B. 36, 3582 C. 1903 [2] 1363).  
 \*3) 3,4-Dimethyläther d. isom. i-3,4-Dioxy-1-[ $\alpha$ - $\beta$ -Dioxypropyl]benzol. Sm.  $88$ — $89^\circ$  (B. 36, 3582 C. 1903 [2] 1363).  
 \*14) 1-Oxy-5-Keto-2,4-Diacetyl-1-Methylhexahydrobenzol (Methylenbisacetylaceton). Sm.  $87$ — $88^\circ$  (B. 36, 2155 C. 1903 [2] 370; A. 332, 21 Anm. C. 1904 [1] 1565).
- $C_{11}H_{16}O_5$  \*2) Anhydrid d.  $\gamma$ -Acetoxyl- $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure. Sm.  $89$ — $90^\circ$  (Bl. [3] 31, 118 C. 1904 [1] 643).
- $C_{11}H_{16}O_6$  16) Acetoxylidioxydihydro- $\alpha$ -Camphylsäure. Sm.  $185^\circ$  u. Zers. (Soc. 83, 857 C. 1903 [2] 572).
- $C_{11}H_{16}N_2$  13) Campherpyrazol. Sm.  $149$ — $150^\circ$ . (2HCl, PtCl<sub>4</sub>) (A. 329, 130 C. 1903 [2] 1323).  
 14) Dihydrocarvonpyrazol. Fl. (2HCl, PtCl<sub>4</sub>) (A. 329, 124 C. 1903 [2] 1323).  
 15) Thujonpyrazol. Fl. (2HCl, PtCl<sub>4</sub>) (A. 329, 125 C. 1903 [2] 1323).  
 16) Isothujonpyrazol. Sm.  $89$ — $90^\circ$ . (2HCl, PtCl<sub>4</sub>) (A. 329, 126 C. 1903 [2] 1323).
- $C_{11}H_{17}N$  \*7) Methylisobutylamidobenzol (Methylisobutylphenylamin). Sd. 227 bis  $228^\circ$  (Soc. 83, 1408 C. 1904 [1] 438).  
 \*13) 5-Dimethylamido-1,2,4-Trimethylbenzol. Sd.  $219^\circ$ . (2HCl, PtCl<sub>4</sub>) (Soc. 85, 236 C. 1904 [1] 1006).

- $C_{11}H_{17}N$  \*20) Isobutylamidomethylbenzol (Isobutylbenzylamin). HJ (*Soc.* 83, 1414 *C.* 1904 [1] 438).  
 \*28) Aethylisopropylamidobenzol. Sd. 220°. (HCl, 4HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 66, 473 *C.* 1903 [1] 561).  
 33) 4-Amido-1-tert. Amylbenzol. Sd. 140—142°<sub>13</sub> (*A.* 327, 222 *C.* 1903 [1] 1408).  
 34) Bornylisocyanid. Sm. 137° (*Soc.* 85, 1193 *C.* 1904 [2] 1125).
- $C_{11}H_{18}O$  11) 4-[ $\beta$ -Ketopropyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten (Methylcampholenon). Sd. 210—212° (*Bl.* [3] 31, 464 *C.* 1904 [1] 1516).  
 12) Vetiol. Sd. 174—176°<sub>10</sub> (D.R.P. 142416 *C.* 1903 [2] 229).
- $C_{11}H_{18}O_2$  \*7) Methylester d. Pulegensäure. Sd. 114—115°<sub>30</sub> (*A.* 327, 126 *C.* 1903 [1] 1412).  
 \*15) Formiat d. Isoborneol. Sd. 103°<sub>18</sub> (*C. r.* 136, 239 *C.* 1903 [1] 584).  
 35) Oxymethylentetrahydrocarvon. Sd. 131—135°<sub>18</sub> (*A.* 329, 123 *C.* 1903 [2] 1322).  
 36) Oxymethylenthujamenthon. Sd. 109—115°<sub>11</sub> (*A.* 329, 127 *C.* 1903 [2] 1323).  
 37) Camphancarbonsäure. Sm. 69—71° (*B.* 35, 4417 *C.* 1903 [1] 330).  
 38) Methylester d.  $\alpha$ -Nonin- $\alpha$ -Carbonsäure. Sd. 133—135°<sub>21</sub> (*C. r.* 136, 554 *C.* 1903 [1] 825).  
 39) Aethylester d.  $\zeta$ -Methyl- $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sd. 135—137°<sub>30</sub> (*C. r.* 136, 554 *C.* 1903 [1] 825).  
 40) Aethylester d. 1,3-Dimethyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sd. 89—91°<sub>12</sub> (D.R.P. 148206 *C.* 1904 [1] 485).  
 41) Propylester d.  $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sd. 133—134°<sub>17</sub> (*Bl.* [3] 31, 508 *C.* 1904 [1] 1602).  
 42) Amylester d.  $\alpha$ -Pentin- $\alpha$ -Carbonsäure. Sd. 127—128°<sub>22</sub> (*C. r.* 136, 553 *C.* 1903 [1] 824).  
 43) Formiat d. Campholenalkohol. Sd. 215—216° (*C. r.* 138, 280 *C.* 1904 [1] 725).  
 44) Formiat d. Geraniol. Sd. 104—105°<sub>10-11</sub> (D.R.P. 80711; *B.* 29, 907 *Ann.*) — *III*, 477; \**III*, 345.  
 45) Formiat d. Cyklogeraniol. Sd. 102—108°<sub>20</sub> (D.R.P. 138141 *C.* 1903 [1] 267).  
 46) Formiat d. Nerol. Sd. 119—121°<sub>25</sub> (*B.* 36, 267 *C.* 1903 [1] 585). — \**III*, 350.
- $C_{11}H_{18}O_3$  15) Oxy- $\beta$ -Campholytätthyläthersäure. Sd. 174—177°<sub>35</sub> (*Soc.* 83, 861 *C.* 1903 [2] 573).  
 16) Methylester d. 3-Keto-1-Methyl-2-Propyl-R-Pentamethylen-2-Carbonsäure. Sd. 138—140°<sub>22</sub> (*C. r.* 138, 210 *C.* 1904 [1] 663).  
 17) Aethylester d.  $\zeta$ -Keto- $\beta$ -Methyl- $\beta$ -Hepten- $\gamma$ -Carbonsäure. Sd. 127 bis 130°<sub>14</sub> (*C. r.* 138, 755 *C.* 1903 [1] 1019).  
 18) Aethylester d. 3-Keto-1-Methyl-2-Aethyl-R-Pentamethylen-2-Carbonsäure. Sd. 119—120°<sub>18</sub> (*C. r.* 138, 210 *C.* 1904 [1] 663).
- $C_{11}H_{18}O_4$  \*4)  $\beta$ -Nonen- $\alpha\beta$ -Dicarbonsäure. Sm. 131° (*A.* 331, 110 *C.* 1904 [1] 931).  
 \*5)  $\gamma$ -Nonen- $\alpha\beta$ -Dicarbonsäure (Hexylatikonsäure). Sm. 79—79,5° (*A.* 331, 116 *C.* 1904 [1] 931).  
 \*33) Diäthylester d.  $\gamma$ -Methyl- $\alpha$ -Buten- $\alpha\gamma$ -Dicarbonsäure. Sd. 131°<sub>14</sub> (*C. r.* 136, 382 *C.* 1903 [1] 697).  
 \*34) Diäthylester d.  $\gamma$ -Methyl- $\alpha$ -Buten- $\beta\gamma$ -Dicarbonsäure. Sd. 126 bis 127°<sub>30</sub> (*Soc.* 83, 1389 *C.* 1904 [1] 435).  
 37) Maclayetin. Sm. 209—210° (*Ch.* Z. 20, 970). — \**III*, 444.  
 38) Dilakton (aus Hexylatikonsäure). Sm. 185—186° u. Zers. (*A.* 331, 122 *C.* 1904 [1] 932).  
 39) Methylester d.  $\gamma\delta$ -Diketo- $\beta$ -Methyloktan- $\delta$ -Carbonsäure (M. d. Isobutyrylbutyrylessigsäure). Sd. 125°<sub>18</sub> *Cu* (*Bl.* [3] 27, 1094 *C.* 1903 [1] 226).  
 40) Methylester d.  $\beta$ -Isobutyroxyl- $\alpha$ -Penten- $\alpha$ -Carbonsäure (M. d. O-Isobutyrylbutyrylessigsäure). Sd. 128°<sub>18</sub> (*Bl.* [3] 27, 1095 *C.* 1903 [1] 227).  
 41) Aethylester (aus d. Verb.  $C_{11}H_{18}O_4Br$ ). Sd. 155°<sub>10</sub> (*Soc.* 77, 858; 79, 1341). — \**III*, 687.  
 42) Diacetat d. 3,4-Dioxy-1-Methylhexahydrobenzol. Sd. 157—158°<sub>40</sub> (*C.* 1904 [2] 220).

- $C_{11}H_{18}O_6$  18) Säure (aus Hexylatikonssäure). Sm. 126—127°.  $Ca + H_2O$ ,  $Ag_2$  (A. 331, 118 C. 1904 [1] 931).  
 19)  $\alpha\gamma$ -Lakton d.  $\beta\gamma$ -Dioxynonan- $\alpha\beta$ -Dicarbonsäure. Sm. 103—104°.  $Ca + 2\frac{1}{2}H_2O$ ,  $Ba + H_2O$ ,  $Ag$  (A. 331, 112 C. 1904 [1] 931).  
 20) Aldehyd d.  $\alpha\gamma$ -Diacetoxyl- $\beta\beta$ -Dimethylbutan- $\delta$ -Carbonsäure. Fl. (M. 25, 1070 C. 1904 [2] 1599).  
 21) Dimethylester d.  $\delta$ -Ketoheptan- $\alpha\eta$ -Dicarbonsäure. Sm. 30—31° (B. 37, 3819 C. 1904 [2] 1606).  
 22) Diäthylester d.  $\gamma$ -Keto- $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sd. 185 bis 190°<sub>100</sub> (Soc. 83, 12 C. 1903 [1] 76, 443).
- $C_{11}H_{18}O_6$  \*3)  $\gamma$ -Acetoxyl- $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 171° (158 bis 159°?) (Bl. [3] 31, 118 C. 1904 [1] 644).  
 20) Diäthylester d.  $\beta$ -Acetoxylpropan- $\alpha\gamma$ -Dicarbonsäure. Sd. 153 bis 154°<sub>11</sub> (Bl. [3] 29, 1014 C. 1903 [2] 1315).
- $C_{11}H_{18}N_2$  13) 2-[ $\beta$ -Diäthylamidoäthyl]pyridin. Sd. 115—116°<sub>18</sub>. (2HCl, PtCl<sub>4</sub>), (2HCl, AuCl<sub>3</sub>), Pikrat (B. 36, 169 C. 1904 [1] 672).  
 14) Menthonpyrazol. Fl. (2HCl, PtCl<sub>4</sub>) (A. 329, 123 C. 1903 [2] 1322).  
 15) Tetrahydrocarvonpyrazol. Fl. (2HCl, PtCl<sub>4</sub>) (A. 329, 124 C. 1903 [2] 1323).  
 16) Thujamenthonpyrazol. Fl. (2HCl, PtCl<sub>4</sub>) (A. 329, 128 C. 1903 [2] 1323).
- $C_{11}H_{19}N$  3) Methyramidocamphen. Sd. 202°<sub>76</sub>. (2HCl, PtCl<sub>4</sub>), HJ (Soc. 85, 334 C. 1904 [1] 808, 1440).
- $C_{11}H_{19}N_3$  C 68,4 — H 9,8 — N 21,7 — M. G. 193.  
 1) 3,4,5-Triamido-1-tert. Amylbenzol. Sm. 149° (A. 327, 216 C. 1903 [1] 1408).
- $C_{11}H_{20}O$  11)  $\beta$ -Oxy- $\beta\zeta$ -Dimethyl- $\beta\zeta$ -Nonadien ( $\alpha$ -Methylgeraniol). Sd. 112—113°<sub>12</sub> (D.R.P. 153120 C. 1904 [2] 624; D.R.P. 154656 C. 1904 [2] 1269).  
 12) Methyläther d. Tanacetylalkohol (M. d. Thujylalkohol) (B. 33, 3122). — \*III, 351.  
 13) Isobutylhexahydrophenylketon. Sd. 114°<sub>20</sub> (C. r. 139, 344 C. 1904 [2] 704).  
 14) isom. 1-Methylmenthon. Sd. 96—97°<sub>18</sub> (C. r. 138, 1140 C. 1904 [2] 106; C. 1904 [2] 1046).
- $C_{11}H_{20}O_2$  \*29) Lakton d.  $\gamma$ -Oxymethyl- $\beta\zeta$ -Dimethylheptan- $\delta$ -Carbonsäure (Am. 30, 232 C. 1903 [2] 933).  
 33)  $\beta\gamma$ -Diketo- $\delta$ -Methyldekan. Sd. 94°<sub>10</sub> (Bl. [3] 31, 1176 C. 1904 [2] 1701).  
 34) 1-1-Methyl-4-Isopropylhexahydrobenzol-3-Carbonsäure (1-Menthan-carbonsäure). Sm. 65; Sd. 167°<sub>21</sub> (B. 35, 4417 C. 1903 [1] 330).  
 35) Acetat d.  $\delta$ -Oxy- $\delta\zeta$ -Dimethyl- $\alpha$ -Hepten (C. 1904 [2] 185).  
 36) Acetat d. 2-Oxy-1-Methyl-3-Isopropyl-R-Pentamethylen. Sd. 92 bis 94°<sub>14</sub> (B. 37, 237 C. 1904 [1] 726).
- $C_{11}H_{20}O_8$  \*7) Aethylester d.  $\zeta$ -Keto- $\beta$ -Methylheptan- $\varepsilon$ -Carbonsäure. Sd. 114 bis 115°<sub>12</sub> (Bl. [3] 31, 759 C. 1904 [2] 309).  
 18)  $\beta$ -Oxy- $\alpha$ -Heptenpropyläther- $\alpha$ -Carbonsäure. Sm. 58° (C. r. 138, 287 C. 1904 [1] 719).  
 19) Methylester d.  $\beta$ -Oxy- $\alpha$ -Oktenmethyläther- $\alpha$ -Carbonsäure. Sd. 245 bis 248° (C. r. 138, 208 C. 1904 [1] 659; Bl. [3] 31, 514 C. 1904 [1] 1602).  
 20) Aethylester d. 5-Oxy-1,3-Dimethylhexahydrobenzol-2-Carbonsäure. Sd. 144—146°<sub>18</sub> (D.R.P. 148207 C. 1904 [1] 486).  
 21) Aethylester d.  $\beta$ -Ketooktan- $\alpha$ -Carbonsäure. Sd. 132—133°<sub>18</sub> (C. r. 136, 755 C. 1903 [1] 1019).  
 22) Aethylester d.  $\gamma$ -Ketooktan- $\beta$ -Carbonsäure. Sd. 128—129°<sub>11</sub> (Bl. [3] 31, 596 C. 1904 [2] 26).  
 23) Aethylester d.  $\varepsilon$ -Ketooktan- $\delta$ -Carbonsäure. Sd. 112—113°<sub>10</sub> (Bl. [3] 31, 594 C. 1904 [2] 26).  
 24) Aethylester d.  $\delta$ -Keto- $\beta$ -Methylheptan- $\gamma$ -Carbonsäure. Sd. 111°<sub>14</sub> (Bl. [3] 31, 594 C. 1904 [2] 26).  
 25) Aethylester d.  $\delta$ -Keto- $\beta$ -Methylheptan- $\varepsilon$ -Carbonsäure. Sd. 107 bis 108°<sub>11</sub> (Bl. [3] 31, 595 C. 1904 [2] 26).  
 26) Aethylester d.  $\varepsilon$ -Keto- $\beta$ -Methylheptan- $\zeta$ -Carbonsäure. Sd. 117 bis 118°<sub>18</sub> (Bl. [3] 31, 599 C. 1904 [2] 26).

- $C_{11}H_{20}O_3$  27) Isobutylester d.  $\beta$ -Ketoheptan- $\gamma$ -Carbonsäure. Sd. 115—116°<sub>18</sub> (Bl. [3] 31, 1072 C. 1904 [2] 1457).
- $C_{11}H_{20}O_4$  \*10) Diäthylester d. Pentan- $\gamma\gamma$ -Dicarbonsäure. Sd. 220—222° (C. r. 137, 715 C. 1903 [2] 1424).
- \*12) Diäthylester d.  $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sd. 257°<sub>746</sub> (C. 1903 [2] 288).
- \*30) Nonan- $\alpha\alpha$ -Dicarbonsäure. Sm. 124°. Ca (J. pr. [2] 67, 416 C. 1903 [1] 1404).
- 36)  $\alpha$ -Acetoxyloktan- $\alpha$ -Carbonsäure. Sd. 171—174°<sub>10</sub> (u. Zers.) (C. r. 138, 698 C. 1904 [1] 1066).
- 37) cis- $\beta\zeta$ -Dimethylheptan- $\gamma\delta$ -Dicarbonsäure. Sm. 118—119°. Ca, Ag<sub>2</sub> (Am. 30, 236 C. 1903 [2] 934).
- 38) trans- $\beta\zeta$ -Dimethylheptan- $\gamma\delta$ -Dicarbonsäure. Sm. 142°. Ag<sub>2</sub> (Am. 30, 234 C. 1903 [2] 934).
- 39) Methyl ester d. Dioxydihydropulegensäure. Sm. 118—119° (A. 327, 127 C. 1903 [1] 1412).
- 40) Diäthylester d. cis- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sd. 138°<sub>24</sub> (C. r. 136, 243 C. 1903 [1] 565).
- 41) Isobutylester d. l- $\alpha$ -Butyroxylpropionsäure. Sd. 110—112°<sub>12-13</sub> (C. 1903 [2] 1419).
- $C_{11}H_{20}O_5$  \*6) Diäthylester d.  $\gamma$ -Oxypentan- $\beta\delta$ -Dicarbonsäure. Sd. 178—179°<sub>58</sub> (Bl. [3] 29, 1021 C. 1903 [2] 1315).
- \*12)  $\alpha\beta$ -Dibutytrat d.  $\alpha\beta\gamma$ -Trioxypropan (C. 1903 [1] 134).
- 14)  $\alpha\gamma$ -Dibutytrat d.  $\alpha\beta\gamma$ -Trioxypropan (C. 1903 [1] 133).
- 15)  $\alpha\beta$ -Diisobutytrat d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 269—272° (C. 1903 [1] 134).
- 16)  $\alpha\gamma$ -Diisobutytrat d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 272—275° (C. 1903 [1] 134).
- $C_{11}H_{20}O_6$  4)  $\beta\gamma$ -Dioxynonan- $\alpha\beta$ -Dicarbonsäure. Ca, Ba (A. 331, 115 C. 1904 [1] 931).
- 5) Säure (aus Hexylatikonsäure). Ba (A. 331, 118 C. 1904 [1] 931).
- $C_{11}H_{20}Br_2$  1)  $\beta\gamma$ -Dibrom- $\beta$ -Undeken. Sd. 137—139°<sub>11</sub> (B. 36, 2552 C. 1903 [2] 655).
- $C_{11}H_{21}Br$  1) Bromundeken. Sd. 122—127°<sub>20</sub> (B. 36, 2549 C. 1903 [2] 654).
- $C_{11}H_{22}O$  \*1)  $\delta$ -Oxy- $\delta$ -Methyl- $\alpha$ -Deken (C. 1903 [2] 1415).
- \*5)  $\beta$ -Ketoundeken. Sd. 231,5—232,5° (220°) (Soc. 81, 1588 C. 1903 [1] 29, 162; Bl. [3] 29, 675 C. 1903 [2] 487; B. 36, 2547 C. 1903 [2] 654; B. 36, 2552 C. 1903 [2] 655).
- \*16)  $\beta$ -Keto- $\delta$ -Methyldekan. Sd. 115°<sub>25</sub> (Bl. [3] 31, 1158 C. 1904 [2] 1708).
- 17)  $\alpha$ -Oxyisoamylhexahydrobenzol. Sd. 123°<sub>20</sub> (C. r. 139, 344 C. 1904 [2] 704).
- 18) l-Oxy-1-Isoamylhexahydrobenzol. Sd. 115°<sub>20</sub> (C. r. 138, 1322 C. 1904 [2] 219).
- 19) Diäthyläther d. Dioxymethylhexahydrobenzol. Sd. 109—110°<sub>20</sub> (C. r. 139, 344 C. 1904 [2] 704).
- 20) Aldehyd d. Dekan- $\alpha$ -Carbonsäure. Sm. —4°; Sd. 116—117°<sub>18</sub> (Bl. [3] 29, 1203 C. 1904 [1] 355; C. r. 138, 699 C. 1904 [1] 1066).
- $C_{11}H_{22}O_2$  \*4)  $\beta\beta\gamma\delta\delta$ -Pentamethylpentan- $\gamma$ -Carbonsäure. Sm. 68° (C. 1903 [2] 129).
- \*8) Äthylester d. Oktan- $\beta$ -Carbonsäure. Sd. 99°<sub>13</sub> (Bl. [3] 31, 748 C. 1904 [2] 303).
- 27) Methylheptylcarbinolester d. Essigsäure (Acetat d.  $\beta$ -Oxynonan). Sd. 213—215° (Soc. 81, 1592 C. 1903 [1] 29, 162).
- $C_{11}H_{22}O_3$  13) Äthylester d.  $\alpha$ -Oxyoktan- $\alpha$ -Carbonsäure. Sm. 69—70° (C. r. 138, 698 C. 1904 [1] 1066).
- 14) Oktylester d. l- $\alpha$ -Oxypropionsäure. Sd. 126—128°<sub>11</sub> (C. 1903 [2] 1419).
- $C_{11}H_{22}O_4$  \*1) Tetramethyläther d.  $\alpha$ -Methylglykosid. Sd. 148—150°<sub>13</sub> (Soc. 83, 1030 C. 1903 [2] 346, 659; Soc. 83, 1039 C. 1903 [2] 659; Soc. 85, 1058 C. 1904 [2] 891).
- 2) Tetramethyläther d.  $\beta$ -Methylglykosid. Sm. 42—43° (Soc. 83, 1035 C. 1903 [2] 346, 659; Soc. 85, 1061 C. 1904 [2] 891).
- 3) Tetramethyläther d.  $\alpha$ -Methylgalaktosid. Sd. 260—262° u. Zers. (Soc. 85, 1074 C. 1904 [2] 892).
- 4) Tetramethyläther d.  $\beta$ -Methylgalaktosid. Sm. 44—45° (Soc. 85, 1078 C. 1904 [2] 892).
- $C_{11}H_{22}Br_2$  \*2)  $\beta\gamma$ -Dibromundeken. Sd. 145—146° (B. 36, 2549 C. 1903 [2] 654).

- $C_{11}H_{28}N$  11) Base (aus Dihydro- $\beta$ -Dimethylamidocampholenmethylhydroxyd). Sd. 191 bis 192°. HCl (*C. r.* 136, 1462 *C.* 1903 [2] 287).
- $C_{11}H_{24}O$  \*5)  $\alpha$ -Oxyundekan. Sm. 11°; Sd. 146°<sub>30</sub> (*Bl.* [3] 29, 1207 *C.* 1904 [1] 355).  
\*6)  $\beta$ -Oxyundekan. Sd. 231—233° (*Soc.* 81, 1593 *C.* 1903 [1] 29, 162; *B.* 36, 2548 *C.* 1903 [2] 654).
- $C_{11}H_{24}O_2$  6)  $\alpha$ -Aethyläther d.  $\alpha\beta$ -Dioxy- $\beta$ -Methyloktan. Sd. 110—112°<sub>14</sub> (*C. r.* 138, 92 *C.* 1904 [1] 505).
- $C_{11}H_{24}O_4$  C 60,0 — H 10,9 — O 29,1 — M. G. 220.  
1) Tetraäthyläther d.  $\alpha\alpha\gamma\gamma$ -Tetraoxypropan + H<sub>2</sub>O. Fl. (*B.* 36, 3659 *C.* 1903 [2] 1311).
- $C_{11}H_{26}N$  \*1)  $\beta$ -Amidoundekan. Sd. 113—114°<sub>26</sub>. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 36, 2554 *C.* 1903 [2] 655).  
3) Propylidiisobutylamin. (2HCl, PtCl<sub>4</sub>) (*C.* 1904 [1] 923).
- $C_{11}H_{26}N_2$  C 70,9 — H 14,0 — N 15,0 — M. G. 186.  
1)  $\alpha\gamma$ -Di[Diäthylamido]propan. Sd. 205—209°. (2HCl, 2HgCl<sub>2</sub>) (*J. pr.* [2] 68, 355 *C.* 1903 [2] 1318).

## — 11 III —

- $C_{11}H_9O_5Br_2$  \*1) Dibrompurpurogallin. Sm. 204—206° (*Soc.* 83, 195 *C.* 1903 [1] 639).
- $C_{11}H_7ON$  \*1) Naphtostyryl. Na (*B.* 35, 4220 *C.* 1903 [1] 165).
- $C_{11}H_7O_5N$  \*3) 4-Nitro-1-Oxynaphtalin-2-Carbonsäure. Sm. 212° (*A.* 330, 103 *C.* 1904 [1] 1076).
- $C_{11}H_7O_5N_3$  4) 4,5-Dinitro-1-Naphtylamid d. Ameisensäure. Sm. 244° (D.R.P. 145191 *C.* 1903 [2] 1098).
- $C_{11}H_7O_5N_3$  3) Verbindung (aus 4-Nitro-3-Phenylisoxazol). K (*A.* 328, 250 *C.* 1903 [2] 1000).
- $C_{11}H_7NBr_4$  1) Brom-2,4,6-Tribromphenylat d. Pyridin. Sm. 310—312° u. Zers. + Br<sub>2</sub> (*A.* 333, 336 *C.* 1904 [2] 1151).
- $C_{11}H_7N_3S$  1) Nitril d.  $\beta$ -Benzylidenamidothiazol- $\beta$ -Carbonsäure. Sm. 140—141° (*B.* 36, 3549 *C.* 1903 [2] 1379).
- $C_{11}H_7N_4Cl$  2) 6-Chlor-2-Phenylpurin (*B.* 37, 2271 *C.* 1904 [2] 199).
- $C_{11}H_8ON_4$  2) 6-Keto-2-Phenylpurin (*B.* 37, 2270 *C.* 1904 [2] 199).  
3) 3-Oxy-2-Methyl-1,4,5,10-Naphttetrazin(Oxymethylpyrazinophenazin). Sm. oberh. 300° (*B.* 36, 4041 *C.* 1904 [1] 183).
- $C_{11}H_8O_2N_2$  8) 3-Phenyl-1,2-Diazin-6-Carbonsäure. Sm. 130—131° (*B.* 36, 494 *C.* 1903 [1] 653).  
9) Laktone d. 5-Oxy-3-Methyl-1-Phenylpyrazol-1<sup>2</sup>-Carbonsäure. Sm. 109°; Sd. 345° (*B.* 37, 2231 *C.* 1904 [2] 229).  
10) 3-Cyanphenylimid d. Bernsteinsäure. Sm. 137—137,5° (*C.* 1904 [2] 103).
- $C_{11}H_8O_3N_2$  13) Amid d.  $\alpha$ -Cyan- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 209° (*C.* 1903 [2] 715).  
14) 5-Nitro-1-Naphtylamid d. Ameisensäure. Sm. 199° (D.R.P. 145191 *C.* 1903 [2] 1098).
- $C_{11}H_8O_4N_2$  23)  $\alpha$ -Cyan- $\beta$ -[3-Nitrophenyl]propen- $\gamma$ -Carbonsäure (*C.* 1904 [1] 877).  
24) Phenylamid d.  $\beta$ -Nitrofuran-2-Carbonsäure. Sm. 180° (*C. r.* 137, 520 *C.* 1903 [2] 1069).
- $C_{11}H_8O_5N_2$  \*1) Methyläther d. 1,6-Dinitro-2-Oxynaphtalin. Sm. 204° (*A.* 335, 143 *C.* 1904 [2] 1135).
- $C_{11}H_8O_6S$  \*3) 3-Oxynaphtalin-2-Carbonsäure-5-Sulfonsäure. Na (*C.* 1903 [2] 42).  
\*4) 3-Oxynaphtalin-2-Carbonsäure-7-Sulfonsäure. Na (*C.* 1903 [2] 42).  
5) 2-Oxynaphtalin-1-Carbonsäure-6-Sulfonsäure (D.R.P. 53343). — \*II, 989.
- $C_{11}H_9ON$  \*5) 2-Benzoylpyrrol. Sm. 77°; Sd. 320° (*B.* 37, 2797 *C.* 1904 [2] 532).  
19) 1-Benzoylpyrrol. Sd. 276°<sub>715</sub> (*B.* 37, 2797 *C.* 1904 [2] 531).
- $C_{11}H_9O_2N$  \*27) 2-Methylchinolin-3-Carbonsäure. Sm. 234° (*J. pr.* [2] 67, 508 *C.* 1903 [2] 252).  
\*37) Chinolinbetain. HCl (*A.* 326, 323 *C.* 1903 [1] 1089).  
\*38) Methylbetain d. Chinolin-4-Carbonsäure. Sm. 232° u. Zers. (*M.* 24, 201 *C.* 1903 [2] 48).  
\*50) Phenylamid d. Furan-2-Carbonsäure. Sm. 123,5° (*B.* 37, 2954 *C.* 1904 [2] 993).

- $C_{11}H_9O_2N$  62) 4-Formylamido-1-Oxynaphtalin. Sm. 168° (D.R.P. 149022 C. 1904 [1] 769).  
 63) 4-Methylchinolin-2-Carbonsäure +  $1\frac{1}{2}H_2O$ . Sm. 153—154°. HCl, (2HCl,  $PtCl_4$ ) (B. 37, 1327 C. 1904 [1] 1350).
- $C_{11}H_9O_2N_2$  10)  $\alpha$ -Nitromethylen- $\beta$ -[1-Naphtyl]hydrazin. Sm. 120° (C. 1903 [2] 427).  
 11) Oxim d. 1,2-Naphtochinonmonourein (G. 27 [1] 236). — \*III, 285.
- $C_{11}H_9O_3N$  \*1) Methyläther d. 1-Nitro-2-Oxynaphtalin. Sm. 126° (C. 1903 [2] 1109).  
 \*34) Methylester d. Benzoylcyanessigsäure. Sm. 74°.  $NH_4$ , Aethylamin-salz (C. r. 136, 690 C. 1903 [1] 920; Bl. [3] 31, 332 C. 1904 [1] 1135).  
 46) Methyläther d. 2-Nitro-1-Oxynaphtalin. Sm. 80° (C. 1903 [2] 1109).  
 47) Cytisolsäure. Sm. oberh. 350° (B. 37, 19 C. 1904 [1] 522).
- $C_{11}H_9O_3N_2$  \*5) Acetylphenylhydrazoncyanessigsäure. Sm. 210°. Pb (J. pr. [2] 67, 404 C. 1903 [1] 1346).  
 9) 6-Semicarbazonmethyl-1,2-Benzpyron. Sm. noch nicht bei 320° (B. 37, 196 C. 1904 [1] 661).  
 10) Benzocat d. 4-Oximido-5-Keto-3-Methyl-4,5-Dihydropyrazol. Sm. 170—180° u. Zers. (G. 34 [1] 182 C. 1904 [1] 1332).
- $C_{11}H_9O_4N$  15)  $\alpha$ -Cyan- $\beta$ -[3,4-Dioxyphenyl]propion-3,4-Methylenäthersäure. Sm. 142° (C. 1904 [1] 879).  
 16)  $\alpha$ -Phthalylamidopropionsäure. Sm. 164° (M. 25, 779 C. 1904 [2] 1121).  
 17) Diäthylester d. 1-Methyltetrahydropyrrol-2,2-Dicarbonsäure. Sd. 133—135°. Pikrat (A. 326, 116 C. 1903 [1] 843).
- $C_{11}H_9O_4Cl_2$  7) Diacetat d. 3,5,6-Trichlor-2,4-Dioxy-1-Methylbenzol. Sm. 126° (A. 328, 308 C. 1903 [2] 1248).
- $C_{11}H_9O_4Br$  5) Phenylbromisoparakonsäure. Sm. 147° (A. 305, 39 Anm.; A. 330, 325 C. 1904 [1] 928). — \*II, 1077.
- $C_{11}H_9O_5N$  10) Anhydrid d.  $\beta$ -[2-Nitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 106° (B. 36, 2673 C. 1903 [2] 948).  
 11) Anhydrid d. Iso- $\beta$ -[2-Nitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 130—131° (B. 36, 2673 C. 1903 [2] 948).
- $C_{11}H_9O_5N_2$  \*2) 2,4-Dinitrophenyloxydhydrat d. Pyridin. Salze siehe (J. pr. [2] 68, 260 C. 1903 [2] 1064; A. 333, 296 C. 1904 [2] 1147).  
 5)  $\alpha$ -[2,4-Dinitrophenyl]imido- $\alpha$ -Oxy- $\alpha\gamma$ -Pentadien. Sm. 180° (B. 34, 3022; A. 333, 296 C. 1904 [2] 1148; J. pr. [2] 70, 25 C. 1904 [2] 1233).
- $C_{11}H_9O_6N$  11) cis-1-[ $\beta$ -Nitrophenyl]-R-Trimethylen-trans-2,3-Dicarbonsäure. Sm. 245° u. Zers. (B. 36, 3780 C. 1904 [1] 42).
- $C_{11}H_9ONCl_2$  2) Chlor-2-Chlorphenylat d. Pyridin +  $H_2O$ . Sm. 88—93°. 2 +  $PtCl_4$  (A. 333, 334 C. 1904 [2] 1150).  
 3) Chlor-4-Chlorphenylat d. Pyridin. Sm. 123—124°. 2 +  $PtCl_4$  (A. 333, 332 C. 1904 [2] 1150).
- $C_{11}H_{10}ON_2$  37) 2-[ $\alpha$ -Oximidobenzyl]pyrrol. Sm. 147° (B. 37, 2797 C. 1904 [2] 532).
- $C_{11}H_{10}O_2N_2$  \*34) Phenylhydrazid d. Furan-2-Carbonsäure. Sm. 144° (B. 37, 2953 C. 1904 [2] 993).  
 48) 4-Acetylamido-3-Phenylisoxazol. Sm. 128—129° (A. 328, 247 C. 1903 [2] 1000).  
 49) 8-Nitro-2,6-Dimethylchinolin. Sm. 114°. HCl (C. 1904 [2] 543).  
 50) Methylester d.  $\alpha$ -Cyan- $\beta$ -Amido- $\beta$ -Phenylakrylsäure. Sm. 181 bis 182° (C. r. 136, 690 C. 1903 [1] 920; Bl. [3] 31, 332 C. 1904 [1] 1135).
- $C_{11}H_{10}O_2N_4$  8) 1-Benzylidenamido-5-Methyl-1,2,3-Triazol-4-Carbonsäure. Sm. 170° (B. 36, 3615 C. 1903 [2] 1380).  
 9) Amid d. Acetylphenylhydrazoncyanessigsäure. Sm. 224° (J. pr. [2] 67, 406 C. 1903 [1] 1347).
- $C_{11}H_{10}O_2Br_4$  \*1)  $\alpha\beta\gamma\delta$ -Tetrabrom- $\delta$ -Phenylvaleriansäure. Sm. 245° (A. 336, 221 C. 1904 [2] 1733).
- $C_{11}H_{10}O_2S$  5)  $\delta$ -Merkapto- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 149° (M. 23, 968 C. 1903 [1] 284).
- $C_{11}H_{10}O_3N_2$  \*29) 8-Nitro-2-Keto-1-Aethyl-1,2-Dihydrochinolin. Sm. 87° (J. pr. [2] 68, 101 C. 1903 [2] 445).  
 31)  $\alpha$ -[4-Nitrophenyl]imido- $\alpha$ -Oxy- $\alpha\gamma$ -Pentadien (J. pr. [2] 70, 32 C. 1904 [2] 1234).  
 32) 6-Aethylnitrosamido-1,2-Benzpyron. Sm. 90° (Soc. 85, 1233 C. 1904 [2] 1124).

- $C_{11}H_{10}O_3N_2$  33) 6- $[\beta$ -Acetylhydrazido]-1,2-Benzpyron. Sm. 163° (*Sec.* 85, 1236 C. 1904 [2] 1124).  
 34) Nitrocytisol. Sm. 275° (*B.* 37, 20 C. 1904 [1] 522).  
 35) 3-Nitrophenylhydroxyd d. Pyridin. Salze siehe (*J. pr.* [2] 70, 40 C. 1904 [2] 1235).  
 36) 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-1<sup>2</sup>-Carbonsäure. Sm. 139° (*B.* 37, 2231 C. 1904 [2] 229).  
 37) Äthylester d. 3-Cyanphenyloxaminsäure. Sm. 148—148,5° (C. 1904 [2] 102).  
 38) Äthylester d. 5-Phenyl-1,2,3-Oxdiazol-4-Carbonsäure. Fl. (*B.* 36, 3613 C. 1903 [2] 1380).  
 39) Amid d.  $\alpha$ -Cyan- $\beta$ -[3,4-Dioxyphenyl]propion-3,4-Methylenäther-säure. Sm. 186—186,5° (C. 1903 [2] 715; 1904 [1] 879).  
 40) Amid d.  $\alpha$ -Cyan- $\beta$ -[4-Oxy-3-Methoxyphenyl]akrylsäure. Sm. 210 bis 210,5° (C. 1904 [2] 903).  
 41) 3-Cyanphenylmonamid d. Bernsteinsäure. Sm. 132—133°. Ag (C. 1904 [2] 103).
- $C_{11}H_{10}O_3Br_4$  6) 3,4-Methylenäther-5-Methyläther d. 2,6-Dibrom-3,4,5-Trioxy-1- $[\alpha\beta$ -Dibrompropyl]benzol (Dibromisomyristicindibromid). Sm. 156° (*B.* 36, 3449 C. 1903 [2] 1176).  
 7) 3,4-Methylenäther-5-Methyläther d. 2,6-Dibrom-3,4,5-Trioxy-1- $[\beta\gamma$ -Dibrompropyl]benzol (Dibrommyristicindibromid). Sm. 130° (*B.* 36, 3448 C. 1903 [2] 1176; *B.* 36, 3453 C. 1903 [2] 1177).
- $C_{11}H_{10}O_3S$  \*5) Methylester d. Naphtalin-1-Sulfonsäure. Sm. 78° (*A.* 327, 117 C. 1903 [1] 1214).  
 \*6) Methylester d. Naphtalin-2-Sulfonsäure. Sm. 54° (*A.* 327, 117 C. 1903 [1] 1214).
- $C_{11}H_{10}O_4N_2$  19) 2,5-Diketo-1-Phenyltetrahydroimidazol-4-Methylcarbonsäure. Sm. 228°. Ag (*B.* 36, 3341 C. 1903 [2] 1175).  
 20) Äthylester d. 1,3-Diketo-1,3-Dihydro-2,4-Benzdiazol-2-Methylcarbonsäure (Ae. d. Chinolinylamidoessigsäure). Sm. 122° (*B.* 37, 2132 C. 1904 [2] 232).
- $C_{11}H_{10}O_4Cl_2$  2) Verbindung (aus Zimmtsäure u. Dichloressigsäure) (*R.* 21, 353 C. 1903 [1] 150).
- $C_{11}H_{10}O_4Br_2$  \*4) Dimethyläther d. 3,4-Dibrom-5,7-Dioxy-3,4-Dihydro-1,2-Benzpyron. Sm. 250—260° (*Ar.* 242, 292 C. 1904 [2] 105).
- $C_{11}H_{10}O_7N_2$  3) Äthylester d. 3,5-Dinitrobenzoylessigsäure. Sm. 73° (*J. pr.* [2] 69, 461 C. 1904 [2] 595).
- $C_{11}H_{10}O_5N_2$  4)  $\beta$ -[2,6-Dinitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 168—169° (*B.* 36, 2674 C. 1903 [2] 948).  
 5) Iso- $\beta$ -[2,6-Dinitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 181° (*B.* 36, 2674 C. 1903 [2] 948).
- $C_{11}H_{10}NCl$  5) Chlorphenylat d. Pyridin +  $H_2O$ . Sm. 105—106°. +  $FeCl_3$ , +  $PtCl_4$ , +  $AuCl_3$  (*J. pr.* [2] 69, 115 C. 1904 [1] 815; *A.* 333, 329 C. 1904 [2] 1150).
- $C_{11}H_{10}NBr$  1) Bromphenylat d. Pyridin. +  $FeCl_3$  (*J. pr.* [2] 69, 118 C. 1904 [1] 815).
- $C_{11}H_{11}ON$  \*49) Cytisol. Sm. 199° (*B.* 37, 19 C. 1904 [1] 522).  
 50) Phenylhydroxyd d. Pyridin. Salze siehe (*J. pr.* [2] 69, 117 C. 1904 [1] 815; *A.* 333, 329 C. 1904 [2] 1150).  
 51) 3-Äthyl-5-Phenylisoxazol. Sm. —2°; Sd. 157—158°<sub>18</sub> (*C. r.* 137, 796 C. 1904 [1] 43).  
 52) 5-Oxy-2,4-Dimethylchinolin. Sm. 200° (*B.* 36, 4017 C. 1904 [1] 293).  
 53) 7-Oxy-2,4-Dimethylchinolin. Sm. 218°. HCl (*B.* 36, 4016 C. 1904 [1] 293).  
 54) Nitril d. isom.  $\beta$ -Keto- $\alpha$ -Phenylbutan- $\alpha$ -Carbonsäure. Sm. 70° (*B.* 36, 2242 C. 1903 [2] 435).
- $C_{11}H_{11}ON_3$  18) 4-Nitroso-3,5-Dimethyl-1-Phenylpyrazol. Sm. 94° (*A.* 325, 192 C. 1903 [1] 647).  
 19) 5-Oxy-3-Propenyl-1-Phenyl-1,2,4-Triazol. Sm. 188° (*B.* 36, 1100 C. 1903 [1] 1140).
- $C_{11}H_{11}O_2N$  \*49) 4-Methylphenylimid d. Bernsteinsäure. Sm. 150° (*B.* 37, 1599 C. 1904 [1] 1418).  
 \*60) 6-Methyläther d. 6,7-Dioxy-2-Methylchinolin. HCl, Pikrat (*B.* 36, 2211 C. 1903 [2] 444).

- $C_{11}H_{11}O_2N$  63) 6-Dimethylamido-1,2-Benzpyron. Sm. 85–86° (*Soc.* 85, 1237 *C.* 1904 [2] 1124).  
 64) 6-Aethylamido-1,2-Benzpyron. Sm. 83° (*Soc.* 85, 1238 *C.* 1904 [2] 1124).  
 65) 6-Oxy-2-Keto-1-Aethyl-1,2-Dihydrochinolin. Sm. 208–210° (207 bis 208°) (*B.* 36, 459 *C.* 1903 [1] 590; *B.* 36, 1176 *C.* 1903 [1] 1364).  
 66) 8-Oxy-2-Keto-1-Aethyl-1,2-Dihydrochinolin. Sm. 202–203° (*B.* 36, 1177 *C.* 1903 [1] 1364).  
 67) Methyläther d. 6-Oxy-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 75° (*B.* 36, 457 *C.* 1903 [1] 590).  
 68) Aethylester d. Phenyleyanessigsäure. *Sd.* 275°<sub>760</sub> (*Am.* 32, 120 *C.* 1904 [2] 953).
- $C_{11}H_{11}O_3N_3$  \*17) Aethylester d. Phenylhydrazoncyanessigsäure. Sm. 82° (*J. pr.* [2] 67, 396 *C.* 1903 [1] 1346).  
 \*18) Aethylester d. isom. Phenylhydrazoncyanessigsäure. Sm. 125° (*J. pr.* [2] 67, 396 *C.* 1903 [1] 1346).  
 \*19) Aethylester d. Phenylazocyanessigsäure. Sm. 84° (*J. pr.* [2] 67, 397 *C.* 1903 [1] 1346).  
 34) 4-Nitro-3,5-Dimethyl-1-Phenylpyrazol. Sm. 103° (*A.* 325, 192 *C.* 1903 [1] 647).  
 35) 7-Acetylamido-2-Acetyldiazol. Sm. 160,5–161,5° (*B.* 37, 2577 *C.* 1904 [2] 658).  
 36) Aethylester d. isom. Phenylazocyanessigsäure. Sm. 118° (*J. pr.* [2] 67, 399 *C.* 1903 [1] 1346).  
 37) Nitril d. 2,6-Dioxy-4-Isobutylpyridin-3,5-Dicarbonsäure.  $NH_4$ ,  $Ni$ ,  $Co + 7H_2O$ ,  $Cu$ ,  $Ag + H_2O$  (*C.* 1903 [2] 192).  
 38) 3-Cyanphenylamid d. Succinaminsäure. Sm. 184° (*C.* 1904 [2] 103).
- $C_{11}H_{11}O_2Cl$  1)  $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 121° (*B.* 36, 2248 *C.* 1903 [2] 436).
- $C_{11}H_{11}O_3N$  \*4) Oxyhydrastinin (*Soc.* 83, 623 *C.* 1903 [1] 591).  
 \*33) Aethylester d. 3-Oxyindol-2-Carbonsäure (*D.R.P.* 138845 *C.* 1903 [1] 547).  
 \*44) Benzylimid d. d-Aepfelsäure. Sm. 105° (*J. pr.* [2] 70, 9 *C.* 1904 [2] 774; *J. pr.* [2] 70, 342 *C.* 1904 [2] 1567).  
 58) Aethylester d.  $\beta$ -[3-Nitrosophenyl]akrylsäure. Sm. 65–66° (*Am.* 32, 397 *C.* 1904 [2] 1498).  
 59) Aethylester d.  $\beta$ -[4-Nitrosophenyl]akrylsäure. Sm. 72–73° (*Am.* 32, 394 *C.* 1904 [2] 1498).  
 60) 4-Oxyphenylimid d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 230° (*G.* 34 [2] 262 *C.* 1904 [2] 1453).  
 61) Benzylimid d. l-Aepfelsäure. Sm. 105° (*B.* 30, 1582; *J. pr.* [2] 70, 10 *C.* 1904 [2] 774).  
 62) Benzylimid d. r-Aepfelsäure. Sm. 118° (*B.* 30, 1582; *J. pr.* [2] 70, 8 *C.* 1904 [2] 773).
- $C_{11}H_{11}O_3N_3$  13) Methylenäther d.  $\gamma$ -Semicarbazon- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 226° (*B.* 37, 1701 *C.* 1904 [1] 1497).  
 14) 4-[ $\beta$ -Oximido- $\beta$ -Phenyläthyl]-1,2,3,6-Dioxiazin. Sm. 195° (*A.* 330, 245 *C.* 1904 [1] 946).  
 15) 1-Benzoyl-3,5-Dioxy-6-Methyl-1,6-Dihydro-1,2,4-Triazin. Sm. 210° (*Am.* 28, 400 *C.* 1903 [1] 90).  
 16) 5-Oxy-1-Phenyl-1,2,3-Triazoläthyläther-4-Carbonsäure +  $H_2O$ . Sm. 96–97° wasserfrei (*A.* 335, 80 *C.* 1904 [2] 1230).  
 17) Aethylester d. 5-Keto-1-Phenyl-4,5-Dihydro-1,2,3-Triazol-4-Carbonsäure. Sm. 73–74° (*B.* 35, 4051 *C.* 1903 [1] 170).  
 18) Amid d. 5-[3,4-Dioxyphenyl]-4,5-Dihydropyrazol-3,4-Methylenäther-1-Carbonsäure.  $UCl_2$  (*B.* 37, 1701 *C.* 1904 [1] 1497).  
 $C_{11}H_{11}O_3N_5$   $C$  50,6 –  $H$  4,2 –  $O$  18,4 –  $N$  26,8 –  $M. G.$  261.  
 1) Azid d. Benzoylamidoacetylamidoessigsäure. Sm. 109–110° (*J. pr.* [2] 70, 79 *C.* 1904 [2] 1033).
- $C_{11}H_{11}O_3Br_3$  4) Acetat d. Pseudo-p-Bromoxypropyldibromphenol. Sm. 107–108° (*B.* 37, 1560 *C.* 1904 [1] 1433).
- $C_{11}H_{11}O_3J$  1) Verbindung (aus Ceropten). Sm. 182° (*C.* 1904 [1] 40).
- $C_{11}H_{11}O_4N$  \*14) Aethylester d.  $\beta$ -[3-Nitrophenyl]akrylsäure. Sm. 78–79° (*Am.* 32, 397 *C.* 1904 [2] 1498).

- $C_{11}H_{11}O_4N$  \*15) Aethylester d.  $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 141—142° (*Am.* 32, 394 *C.* 1904 [2] 1498).
- 26) *cis*-1-[*p*-Amidophenyl]-*R*-Trimethylen-*trans*-2,3-Dicarbonsäure. Sm. noch nicht bei 300°. HCl (*B.* 36, 3781 *C.* 1904 [1] 42).
- 27) Methyl ester d.  $\alpha$ -Benzoximidopropionsäure. Sm. 103°; Sd. 190°<sub>12</sub> u. Zers. (*Bl.* [3] 31, 1071 *C.* 1904 [2] 1457).
- 28) 4-Methylphenylimid d. *d*-Weinsäure. Sm. 235° u. Zers. (*Soc.* 83, 1366 *C.* 1904 [1] 85).
- $C_{10}H_{11}O_4N_3$  6) 4-Methyläther d. 4-[ $\beta$ -Oximido- $\beta$ -4-Oxyphenyläthyl]-1,2,3,6-Dioxidiazin. Sm. 197—198° (*A.* 330, 243 *C.* 1904 [1] 945).
- 7)  $\alpha\gamma$ -Laktam d.  $\alpha$ -Cyan- $\beta\gamma$ -Diimido- $\epsilon$ -Ketoheptan- $\alpha$ -Dicarbonsäure- $\delta$ -Aethylester. Sm. 168° (*A.* 332, 156 *C.* 1904 [2] 192).
- 8)  $\gamma$ -Acetat d.  $\alpha$ -Phenylimido- $\beta$ -Nitro- $\gamma$ -Oximidopropan. Sm. 115—116° (*Am.* 29, 269 *C.* 1903 [1] 958).
- $C_{11}H_{11}O_4N_5$  2)  $\gamma$ -Semicarbazone- $\delta$ -Oximido- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten. Sm. 196 bis 197° u. Zers. (*C.* 1904 [1] 28; *A.* 330, 254 *C.* 1904 [1] 946).
- $C_{11}H_{11}O_4Br$  4) 6-Brom-3,5-Dioxy-2,4-Diacetyl-1-Methylbenzol. Sm. 79° (*Soc.* 85, 978 *C.* 1904 [2] 454, 711).
- $C_{11}H_{11}O_5N$  \*16) Benzol-1-Carbonsäure-2-Acetylamidoessigsäure (D.R.P. 147633 *C.* 1904 [1] 66; D.R.P. 151435 *C.* 1904 [1] 1585).
- 23)  $\alpha$ -Benzoylamidopropionsäure-2-Carbonsäure +  $H_2O$ . Sm. 129°. Ba +  $4H_2O$  (*M.* 25, 781 *C.* 1904 [2] 1122).
- 24) Aethylester d. 2-Nitrobenzoylessigsäure. Fl. K, Cu (*Soc.* 85, 152 *C.* 1904 [1] 724).
- $C_{11}H_{11}O_6N$  \*7) Diacetat d. 4-Nitro-1-Dioxymethylbenzol. Sm. 126,5° (*Am.* 31, 168 *C.* 1904 [1] 875).
- 12) Iso- $\beta$ -[2-Nitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 204,5° (*B.* 36, 2672 *C.* 1903 [2] 948).
- $C_{11}H_{11}O_6N_3$  4) Dimethylester d. 2-Nitrophenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 143—144° (*B.* 37, 4176 *C.* 1904 [2] 1704).
- 5) Dimethylester d. 3-Nitrophenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 115—116° (*B.* 37, 4177 *C.* 1904 [2] 1704).
- 6) Dimethylester d. 4-Nitrophenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 162—163° (*B.* 37, 4177 *C.* 1904 [2] 1704).
- $C_{11}H_{11}O_7N$  6) 2-Methylester d. 6-Nitro-3,4-Dioxybenzoldimethyläther-1-Carbonsäurealdehyd-2-Carbonsäure (2-M. d. Nitroopiansäure). Sm. 76—78° (*M.* 24, 801 *C.* 1904 [1] 164).
- 7) Pseudomethylester d. 6-Nitro-3,4-Dioxybenzoldimethyläther-1-Carbonsäurealdehyd-2-Carbonsäure (Ps. d. Nitroopiansäure). Sm. 181,5—182,5° (*M.* 24, 796 *C.* 1904 [1] 163).
- $C_{11}H_{11}NCl_2$  1) 3-Dichlormethyl-2,3-Dimethylpseudoindol. Sm. 73—74° (*C.* 1904 [2] 342).
- $C_{11}H_{11}N_2Cl$  5) 5-Chlor-3-Methyl-1-[2-Methylphenyl]pyrazol. Sm. 56° (*B.* 37, 2229 *C.* 1904 [2] 228).
- $C_{11}H_{11}N_2Br$  \*2) 5-Brom-3,4-Dimethyl-1-Phenylpyrazol. Sm. 51° (*A.* 331, 241 *C.* 1904 [1] 1221).
- $C_{11}H_{12}ON_2$  \*8) Antipyrin. +  $Hg(NO_3)_2$ , +  $Hg(NO_3)_2$ , +  $Hg_2(NO_3)_2$  (*Bl.* [3] 29, 201 *C.* 1903 [1] 839; *A.* 328, 78 *C.* 1903 [2] 250).
- \*53) Amid d.  $\alpha$ -Cyan- $\beta$ -[3-Methylphenyl]propionsäure. Sm. 108,5° (*A.* 325, 211 *C.* 1903 [1] 439).
- 55) 5-Keto-4,4-Dimethyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 51° (*Bl.* [3] 31, 166 *C.* 1904 [1] 869).
- 56) Nitril d. 2-Butyrylamidobenzol-1-Carbonsäure. Sm. 89—89,5° (*C.* 1903 [1] 175).
- 57) Nitril d. 3-Butyrylamidobenzol-1-Carbonsäure. Sm. 72,5—73,5° (*C.* 1904 [2] 101).
- 58) Nitril d. 2-Isobutyrylamidobenzol-1-Carbonsäure. Sm. 111—111,5° (*C.* 1903 [1] 175).
- 59) Nitril d. 3-Isobutyrylamidobenzol-1-Carbonsäure. Sm. 101° (*C.* 1904 [2] 101).
- $C_{11}H_{12}O_2N_2$  \*39) Amid d.  $\alpha$ -Cyan- $\beta$ -[4-Methoxyphenyl]propionsäure. Sm. 172° (*A.* 325, 223 *C.* 1903 [1] 439).
- 40)  $\gamma$ -Nitrimido- $\alpha$ -Phenyl- $\beta$ -Methyl- $\alpha$ -Buten? Sm. 154—155° (*A.* 330, 246 *C.* 1904 [1] 946).

- $C_{11}H_{12}O_2N_2$  41) 3,5-Diketo-4,4-Dimethyl-1-Phenyltetrahydropyrazol. Sm. 177° (Soc. 83, 1251 C. 1903 [2] 1422).  
 42) 3-Nitro-2-Methyl-1-Aethylindol. Sm. 125° (G. 34 [2] 62 C. 1904 [2] 710).  
 43) Tryptophan (C. 1903 [2] 1011; B. 37, 1803 C. 1904 [1] 1610).  
 44) Monoacetylhydrazon d.  $\alpha\beta$ -Diketo- $\alpha$ -Phenylpropan. Sm. 154° (B. 36, 3187 C. 1903 [2] 939).  
 45) Aethylester d.  $\alpha$ -Cyanphenylamidoessigsäure. Sm. 57° (Am. 30, 469 C. 1904 [1] 378).  
 46) Aethylester d.  $\beta$ -Phenyl- $\alpha$ -Diazopropionsäure. Sd. 90—94°<sub>11</sub> (B. 37, 1268 C. 1904 [1] 1334).
- $C_{11}H_{12}O_2N_4$  10)  $\gamma$ -Oximido- $\delta$ -Semicarbazon- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 225—226° u. Zers. (C. 1903 [2] 1432; A. 330, 251 C. 1904 [1] 946).  
 11) isom.  $\gamma$ -Oximido- $\delta$ -Semicarbazon- $\alpha$ -Phenyl- $\alpha$ -Buten? Sm. 242° (C. 1903 [2] 1432; A. 330, 252 C. 1904 [1] 946).  
 12) 1-Methylphenylamido-5-Methyl-1,2,3-Triazol-4-Carbonsäure + H<sub>2</sub>O. Sm. 125° (148° wasserfrei) (A. 325, 159 C. 1903 [1] 645).  
 13) Aethylester d. 5-Amido-1-Phenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 122° (B. 35, 4059 C. 1903 [1] 171).
- $C_{11}H_{12}O_2Br_2$  \*7) Aethylester d. i- $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Sm. 75—76° (Soc. 83, 671 C. 1903 [2] 115).  
 15)  $\alpha\beta$ -Dibrom- $\beta$ -[2,5-Dimethylphenyl]propionsäure. Sm. 179—180° u. Zers. (G. 34 [2] 121 C. 1904 [2] 1214).
- $C_{11}H_{12}O_3N_2$  20) Aethylester d.  $\beta$ -[4-Oxyphenyl]- $\alpha$ -Diazopropionsäure. Fl. (B. 37, 1265 C. 1904 [1] 1333).  
 21) Aethylester d. Säure C<sub>9</sub>H<sub>8</sub>O<sub>3</sub>N<sub>2</sub>. Sm. 168° (C. 1904 [1] 1555).
- $C_{11}H_{12}O_3N_4$  6) 3-Ureido-2,5-Diketo-4-Methyl-1-Phenyltetrahydroimidazol. Zers. bei 192° (C. 1904 [2] 1029).
- $C_{11}H_{12}O_3N_3$  3) 47,8 — H 4,3 — O 17,4 — N 30,4 — M. G. 276.  
 1) Azid d.  $\beta$ -Phenylureidoacetylamidoessigsäure. Sm. 108° u. Zers. (J. pr. [2] 70, 257 C. 1904 [2] 1464).
- $C_{11}H_{12}O_3Br_2$  16) 3,4-Methylenäther-5-Methyläther d. 3,4,5-Trioxyl-1-[ $\alpha\beta$ -Dibrompropyl]benzol (Isomyristicindibromid). Sm. 109° (105°) (B. 23, 1809; B. 36, 3448 C. 1903 [2] 1176). — III, 638.
- $C_{11}H_{12}O_3Br_4$  1)  $\alpha$ ,3-Dimethyläther d. 2,5,6-Tribrom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 126—127° (A. 329, 34 C. 1903 [2] 1437).
- $C_{11}H_{12}O_4N_2$  \*5) Benzoylamidoacetylamidoessigsäure. Sm. 206,5° (J. pr. [2] 70, 76 C. 1904 [2] 1033).  
 \*6) Dimethylester d. Phenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 62° (B. 37, 4170 C. 1904 [2] 1703).  
 21) 2,4-Di[Acetylamido]benzol-1-Carbonsäure. Sm. 261° (B. 36, 1802 C. 1903 [2] 283).  
 22) 4-Phenyltetrahydropyrazol-3,5-Dicarbonsäure. Sm. 227—228° (B. 36, 3779 C. 1904 [1] 41).  
 23) 2-Methylphenylamid d. N-Acetoximidooxyessigsäure. Sm. 125° (Soc. 81, 1571 C. 1903 [1] 158).  
 24) 3-Amidoformylphenylmonamid d. Bernsteinsäure. Sm. 203—205°. Ag (C. 1904 [2] 103).
- $C_{11}H_{12}O_5N_2$  \*9) Aethylester d. 3-Nitro-4-Acetylamidobenzol-1-Carbonsäure. Sm. 96—97° (D.R.P. 151725 C. 1904 [1] 1587).  
 13)  $\beta$ -Phenylureidobernsteinsäure. Sm. 183°. Ba + H<sub>2</sub>O (B. 36, 3330 C. 1903 [2] 1175).  
 14) Methylester d.  $\beta$ -Nitro- $\gamma$ -Oximido- $\gamma$ -Phenylbuttersäure. Sm. 128° u. Zers. (A. 329, 251 C. 1904 [1] 31).  
 15) Aethylester d. 3-Nitrobenzoylamidoessigsäure. Sm. 75° (B. 36, 1647 C. 1903 [2] 32).  
 16) Aethylester d. 4-Nitrobenzoylamidoessigsäure. Sm. 144° (B. 36, 1648 C. 1903 [2] 32).  
 17) 2-Aethylester d. Phenylnitrosamidoessigsäure-2-Carbonsäure. Fl. (D.R.P. 138207 C. 1903 [1] 305).  
 18) Monamid d.  $\beta$ -[2-Nitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 142° (B. 36, 2674 C. 1903 [2] 948).  
 19) Monamid d. Iso- $\beta$ -[2-Nitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 156° (B. 36, 2674 C. 1903 [2] 948).

- $C_{11}H_{12}O_6S$  1)  $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure- $\gamma$ -Sulfonsäure. Sm. 76°. K, K<sub>2</sub>, Ca + 3H<sub>2</sub>O, Ba (*Am.* 31, 247 *C.* 1904 [1] 1080).
- $C_{11}H_{12}O_6N_2$  10) Iso- $\beta$ -[2-Nitro-4-Amidophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 185° (*B.* 36, 2676 *C.* 1903 [2] 948).
- $C_{11}H_{12}O_6S$  1) Piperonylidenacetonehydrosulfonsäure. Na + 2H<sub>2</sub>O, K + H<sub>2</sub>O, Ba + 2H<sub>2</sub>O (*B.* 37, 4050 *C.* 1904 [2] 1648).
- $C_{11}H_{12}O_7N_2$  7)  $\beta$ -[2-Nitro-4-Hydroxylamidophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 165° u. Zers. NH<sub>4</sub> (*B.* 35, 2073; *B.* 36, 2675 *C.* 1903 [2] 948).
- $C_{11}H_{12}O_8N_4$  C 40,2 — H 3,7 — O 39,0 — N 17,1 — M. G. 328.
- $C_{11}H_{12}O_8S_2$  1) Isobutylester d. 2,4,6-Trinitrophenylamidoameisensäure. Sm. 134° (*Soc.* 85, 652 *C.* 1904 [2] 311).
- $C_{11}H_{12}O_8S_2$  1) 4-Methyl-1,3-Phenylendi[Sulfonessigsäure]. Fl. Ba (*J. pr.* [2] 68, 337 *C.* 1903 [2] 1172).
- $C_{11}H_{12}NJ$  \*8) Jodäthylat d. Chinolin. Sm. 156—157° (*B.* 37, 2009 *C.* 1904 [2] 124).
- $C_{11}H_{12}N_2S$  \*5) Thiopyrin. HJ (*A.* 331, 197 *C.* 1904 [1] 1218).
- \*6) Methyläther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sd. 306 bis 307°<sub>reg.</sub> HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), HJ, HNO<sub>3</sub>, Pikrat (*A.* 331, 224 *C.* 1904 [1] 1220; *A.* 331, 201 *C.* 1904 [1] 1218).
- 7) Isothioantipyrin. Sm. 136° (*B.* 36, 718 *C.* 1903 [1] 776).
- 8) 4-Thiocarbonyl-2-Propyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 182 bis 183° (*C.* 1903 [1] 1270).
- 9) 4-Thiocarbonyl-2-Isopropyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 203 bis 204° (*C.* 1903 [1] 1270).
- $C_{11}H_{12}ClBr$  1)  $\alpha$ -Chlor- $\beta$ -Brom- $\alpha$ -Phenyl- $\gamma$ -Methyl- $\alpha$ -Buten. Sd. 125—129°<sub>10</sub> (*B.* 37, 1088 *C.* 1904 [1] 1260).
- 2)  $\alpha$ -Chlor- $\beta$ -Brom- $\alpha$ -[2,5-Dimethylphenyl]propen. Sd. 258—261° (*B.* 36, 773 *C.* 1903 [1] 834).
- $C_{11}H_{13}ON$  \*2)  $\delta$ -Phenylimido- $\beta$ -Ketopentan. Sm. 51—53°; Sd. 279—281°<sub>115</sub> (*B.* 37, 1325 *C.* 1904 [1] 1345).
- 46) d-1-Acetyl-2-Methyl-2,3-Dihydroindol. Sm. 89° (*Soc.* 85, 1335 *C.* 1904 [2] 1657).
- 47) l-1-Acetyl-2-Methyl-2,3-Dihydroindol. Sm. 89° (*Soc.* 85, 1333 *C.* 1904 [2] 1657).
- 48) 2-Oxy-3-Isopropylpseudoindol (2-Keto-3-Isopropyl-2,3-Dihydroindol). Sm. 106°. Ag (*M.* 24, 568 *C.* 1903 [2] 887).
- 49) Aldehyd d.  $\beta$ -[4-Dimethylamidophenyl]akrylsäure (*B.* 37, 827 *C.* 1904 [1] 1152).
- $C_{11}H_{13}ON_3$  15)  $\gamma$ -Semicarbazon- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 185° (*B.* 36, 4381 *C.* 1904 [1] 454).
- 16)  $\gamma$ -Semicarbazon- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 187° (*B.* 37, 3183 *C.* 1904 [2] 991).
- 17)  $\gamma$ -Semicarbazon- $\alpha$ -[4-Methylphenyl]propen. Sm. 210° (*B.* 36, 851 *C.* 1903 [1] 975).
- 18) 2-Semicarbazon-1-Methyl-2,3-Dihydroinden. Sm. 195° (*A.* 336, 6 *C.* 1904 [2] 1466).
- 19)  $\alpha$ -Cyanmethyl- $\alpha$ -Aethyl- $\beta$ -Phenylharnstoff. Sm. 116° (*B.* 37, 4092 *C.* 1904 [2] 1725).
- 20) 5-Oxy-3-Propyl-1-Phenyl-1,2,4-Triazol. Sm. 146° (*B.* 36, 1098 *C.* 1903 [1] 1140).
- $C_{11}H_{13}OBr$  7)  $\alpha$ -Bromisobutylphenylketon. Sm. 47° (*B.* 37, 1088 *C.* 1904 [1] 1260).
- $C_{11}H_{13}O_2N$  \*52) Aethyl-4-Acetylamidophenylketon. Sm. 175° (*C.* 1903 [1] 1222).
- 60)  $\delta$ -[3-Oxyphenyl]imido- $\beta$ -Oxy- $\beta$ -Penten. Sm. 135° (*B.* 36, 4015 *C.* 1904 [1] 293).
- 61) 4-Acetyl-amido-2 oder -3-Acetyl-1-Methylbenzol. Sm. 105° (*D.R.P.* 56971). — \*III, 118.
- 62) Methyl-4-Propionylamidophenylketon. Sm. 136° (*C.* 1903 [1] 832; *Soc.* 85, 390 *C.* 1904 [1] 1404).
- 63) 4-Methyläther d.  $\gamma$ -Oximido- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten. Sm. 119 bis 120° (*A.* 330, 242 *C.* 1904 [1] 945).
- 64) 3-Keto-1-Oxy-1-Methyl-2-Aethyl-2,3-Dihydroisindol. Sm. 93—94° u. Zers. (*B.* 37, 387 *C.* 1904 [1] 668).
- 65) 8-Amido-1,2,3,4-Tetrahydronaphtalin-1-Carbonsäure. Sm. 160 bis 161° u. Zers. Ag + AgNO<sub>3</sub> (*B.* 35, 4222 *C.* 1903 [1] 166).

- $C_{11}H_{13}O_2N$  66) Amid d.  $\beta$ -Keto- $\alpha$ -Phenylbutan- $\alpha$ -Carbonsäure. Sm. 114—116° (B. 36, 2244 C. 1903 [2] 435).
- $C_{11}H_{13}O_2N_3$  16)  $\gamma$ -Semicarbazon- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Buten. Sm. 206—207° u. Zers. (B. 37, 3184 C. 1904 [2] 991).
- 17) Methyläther d.  $\gamma$ -Semicarbazon- $\alpha$ -[4-Oxyphenyl]propen. Sm. 199° (B. 36, 854 C. 1903 [1] 976).
- 18) Aethyläther d. 3-Oxy-5-Keto-4-Methyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 95° (B. 36, 3148 C. 1903 [2] 1073).
- 19) 3,5-Diketo-4-Aethyl-1-Phenylhexahydro-1,2,4-Triazin. Sm. 135 bis 136° (B. 36, 3886 C. 1904 [1] 27).
- $C_{11}H_{13}O_3N$  \*1) Corydaldin (Soc. 83, 622 C. 1903 [1] 591).
- \*3) Hydrastinin (Soc. 83, 623 C. 1903 [1] 591; Soc. 85, 1005 C. 1904 [2] 455, 716).
- 62)  $\alpha$ -[4-Aethoxyphenyl]imidopropionsäure. Sm. 228° (G. 34 [2] 273 C. 1904 [2] 1454).
- 63) Aethyl ester d. Phenacetylamidoameisensäure. Sm. 113° (B. 36, 746 C. 1903 [1] 827).
- 64) Aethyl ester d. 4-Acetylamidobenzol-1-Carbonsäure. Sm. 110° (D.R.P. 151725 C. 1904 [1] 1587).
- 65) Aethyl ester d. 2-Methylphenyloxaminsäure. Sm. 40° (Soc. 81, 1571 C. 1903 [1] 158).
- 66) Phenylamid d.  $\alpha$ -Acetoxypropionsäure. Sm. 121—122° (B. 37, 3974 C. 1904 [2] 1605).
- 67) Phenylmonamid d. Propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 126—127° (C. 1904 [2] 955).
- 68) Phenylmonamid d. Propan- $\beta\beta$ -Dicarbonsäure. Sm. 133° (Soc. 83, 1246 C. 1903 [2] 1421).
- $C_{11}H_{13}O_3N_3$  15) Methylenäther d.  $\beta$ -Semicarbazon- $\alpha$ -[3,4-Dioxyphenyl]propan. Sm. 163° (A. 332, 333 C. 1904 [2] 652).
- 16) 5- oder -7-Nitro-2-Keto-1,3,4,6-Tetramethyl-2,3-Dihydrobenzimidazol. Sm. 132° (B. 36, 3974 C. 1904 [1] 178).
- 17) Semicarbazon d. Verbindung  $C_{10}H_{10}O_3$  (aus Isosafrol). Sm. 158° (B. 36, 3580 C. 1903 [2] 1363).
- 18) Benzylester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 176° (C. r. 138, 985 C. 1904 [1] 1398).
- 19) N-Acetat d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oximido- $\alpha$ -Oxypropan. Sm. 113° (Soc. 81, 1574 C. 1903 [1] 158).
- $C_{11}H_{13}O_3Br_3$  3)  $\alpha,3$ -Dimethyläther d. 2,5-Dibrom-3,4-Dioxy-1- $[\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 111—112° (A. 329, 26 C. 1903 [2] 1436).
- 4) Verbindung (aus Maticoöl). Sm. 116° (B. 35, 4361 C. 1903 [1] 331).
- $C_{11}H_{13}O_4N$  \*43)  $\beta$ -Benzylamid d. i- $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 131°. Benzylaminsalz (B. 37, 2125 C. 1904 [2] 439).
- \*44)  $\beta$ -Benzylamid d. d- $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 130—131° u. Zers. Na, Ag, Benzylaminsalz (B. 37, 2124 C. 1904 [2] 439).
- \*45)  $\beta$ -Benzylamid d. l- $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 130—131° (B. 37, 2125 C. 1904 [2] 439).
- 57) Dimethyläther d.  $\beta$ -Nitro- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha$ -Propen. Sm. 72° (A. 332, 335 C. 1904 [2] 652).
- 58)  $\beta$ -Methyläther-3,4-Methylenäther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]propan. Sm. 74°; Sd. 200—205° (i. V.). HCl (A. 332, 334 C. 1904 [2] 652).
- 59) Acetyldamascenin. Sm. 203—204° (Ar. 242, 303 C. 1904 [2] 456).
- 60) Methyläthylester d. Phenylamin-NN-Dicarbonsäure. Sm. 69° (B. 37, 3681 C. 1904 [2] 1495).
- 61) Benzylmonamid d. r-Aepfelsäure (J. pr. [2] 70, 8 C. 1904 [2] 774).
- $C_{11}H_{13}O_4N_3$  \*10)  $\beta$ -Phenylureidoacetylamidoessigsäure. Sm. 176°. Ag (J. pr. [2] 70, 253 C. 1904 [2] 1464).
- 11) Monoamid d. Phenylureidobernsteinsäure. Sm. 164°. Ba, Ag<sub>2</sub> (B. 36, 3338 C. 1903 [2] 1175).
- $C_{11}H_{13}O_4N_5$  2) Di[Methylamid] d. 2-Nitrophenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 186—187° (B. 37, 4176 C. 1904 [2] 1704).

- $C_{11}H_{13}O_4N_5$  3) Di[Methylamid] d. 3-Nitrophenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 202—203° (B. 37, 4177 C. 1904 [2] 1704).  
4) Di[Methylamid] d. 4-Nitrophenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 243° (B. 37, 4177 C. 1904 [2] 1704).
- $C_{11}H_{13}O_4J$  \*1) Diacetat d. 3-Jodoso-1-Methylbenzol. Sm. 148° (A. 327, 270 C. 1903 [2] 350).
- $C_{11}H_{13}O_5N$  \*18) Diäthylester d. 4-Oxypyridin-2,6-Dicarbonsäure +  $H_2O$ . Sm. 80 bis 81° (M. 24, 204 C. 1903 [2] 48).  
30) 1-Methylester-3-Aethylester d. 4-Oxybenzol-1-Carbonsäure-3-Amidoameisensäure. Sm. 158° (A. 325, 323 C. 1903 [1] 770).
- $C_{11}H_{13}O_5N_3$  6) Semicarbazon d. Verb.  $C_{10}H_{10}O_5$ . Sm. 256° u. Zers. (B. 36, 3231 C. 1903 [2] 941).
- $C_{11}H_{13}O_5N_3$  2) Dimethyläther d. 2,5,6-Trinitro-3,4-Dioxy-1-Propylbenzol. Sm. 97,3° (B. 36, 862 C. 1903 [1] 1085).
- $C_{11}H_{13}N_2J$  \*8) Jodmethylat d. 1-Methyl-2-[3-Pyridyl]pyrrol (J. d. Nikotyrin). Sm. 207° (C. r. 137, 861 C. 1904 [1] 104).
- $C_{11}H_{13}N_3S$  5)  $\alpha$ -Cyanmethyl- $\alpha$ -Aethyl- $\beta$ -Phenylthioharnstoff. Sm. 184—185° (B. 37, 4092 C. 1904 [2] 1725).
- $C_{11}H_{14}ON_2$  \*1) Cytisin (B. 37, 16 C. 1904 [1] 522).  
\*30) Benzylidenhydrazid d. Buttersäure. Sm. 98° (J. pr. [2] 69, 487 C. 1904 [2] 599).  
31) 6-Methylnitrosamido-1,2,3,4-Tetrahydronaphtalin. Fl. (Soc. 85, 736 C. 1904 [2] 117, 339).  
32) 4-Benzylidenmorpholin. Sm. 89° (B. 35, 4476 C. 1903 [1] 404).  
33) Methylamid d.  $\beta$ -Methylamido- $\beta$ -Phenylakrylsäure. Sm. 118—119° (C. 1904 [2] 905).  
34) Benzylidenhydrazid d. Isobuttersäure. Sm. 103° (J. pr. [2] 69, 498 C. 1904 [2] 600).
- $C_{11}H_{14}OBr_2$  3) Methyläther d.  $\beta\gamma$ -Dibrom- $\beta$ -[4-Oxyphenyl]butan. Fl. (B. 37, 3997 C. 1904 [2] 1641).
- $C_{11}H_{14}O_2N_2$  \*15)  $\alpha$ -Phenylhydrazonbutan- $\alpha$ -Carbonsäure. Sm. 114—115° (A. 331, 131 C. 1904 [1] 932).  
46) Di[3,5-Dimethyl-4-Isoxazolyl]methan. Sm. 141—142° (B. 36, 2167, 2176 C. 1903 [2] 371; A. 332, 21 C. 1904 [1] 1565).  
47) 4-Benzoylamidomorpholin. Sm. 214° (B. 35, 4476 C. 1903 [1] 404).
- $C_{11}H_{14}O_2N_4$  \*2) 1-[4-Nitrophenyl]azohexahydropyridin (C. 1903 [2] 550).  
5) Di[Methylamid] d. Phenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 117—118° (B. 37, 4172 C. 1904 [2] 1703).
- $C_{11}H_{14}O_2S$  \*2)  $\gamma$ -[2,4-Dimethylphenyl]sulfonpropen. Sm. 52° (J. pr. [2] 68, 309 C. 1903 [2] 1115).
- $C_{11}H_{14}O_2S_2$  1)  $\alpha\alpha$ -Dimerkaptopropionäthylphenyläthersäure. Sm. 98—99° (B. 36, 302 C. 1903 [1] 500).
- $C_{11}H_{14}O_3N_2$  \*39) Amid d. Benzol-1-Carbonsäure-2-Amidoessigsäure-1-Aethylester. Sm. 180° (D.R.P. 137846 C. 1903 [1] 108).  
47) 5-Oxy-2,4-Di[ $\alpha$ -Oximidoäthyl]-1-Methylbenzol. Sm. 191° (B. 36, 2164 C. 1903 [2] 370).  
48)  $\alpha$ -Amidoacetylamido- $\beta$ -Phenylpropionsäure. Sm. 270° u. Zers. (B. 37, 3313 C. 1904 [2] 1307).  
49) Methylester d.  $\alpha$ -Benzoylamidoäthylamidoameisensäure. Sm. 150° (J. pr. [2] 70, 146 C. 1904 [2] 1394).  
50) Aethylester d.  $\beta$ -Phenylureidoessigsäure. Sm. 108—109° (Am. 28, 394 C. 1903 [1] 90).  
51) Aethylester d.  $\alpha$ -[2-Methylphenyl]harnstoff- $\beta$ -Carbonsäure. Sm. 137° (Soc. 81, 1571 C. 1903 [1] 158).
- $C_{11}H_{14}O_3N_4$  \*3) Hydrazid d. Benzoylamidoacetylamidoessigsäure. Sm. 227—230° (J. pr. [2] 70, 78, 107 C. 1904 [2] 1033, 1036).  
4)  $\alpha$ -[3-Nitrobenzyliden]amido- $\alpha$ -Methyl- $\beta$ -Aethylharnstoff. Sm. 142 bis 143° (B. 37, 2324 C. 1904 [2] 312).
- $C_{11}H_{14}O_3Br_2$  \*4)  $\alpha$ ,3-Dimethyläther d. 5-Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]-benzol. Sm. 106—107° (A. 328, 16 C. 1903 [2] 1435).
- $C_{11}H_{14}O_3S$  4) Sulton d.  $\gamma$ -Oxy- $\gamma$ -Phenylpentan- $\gamma^2$ -Sulfonsäure. Sm. 91° (B. 37, 3260 C. 1904 [2] 1031).

- $C_{11}H_{14}O_4N_2$  31) 1- $\alpha$ -Amidoacetylamido- $\beta$ -[4-Oxyphenyl] propionsäure (l-Glycyl-tyrosin). Sm. 165° (B. 37, 2495 C. 1904 [2] 425; B. 37, 3104 C. 1904 [2] 1210).
- 32) 2-Methyl-1,4-Phenylendi[Amidoessigsäure]. Sm. 150—160° (D.R.P. 145062 C. 1903 [2] 1037).
- 33) Aethylester d. 3-Nitro-4-Dimethylamidobenzol-1-Carbonsäure. Sm. 80—81° (B. 37, 1031 C. 1904 [1] 1208).
- $C_{11}H_{14}O_5N_2$  10) 3,5-Dinitro-4-Oxy-1-tert. Amylbenzol. Sm. 65°. Ag (A. 327, 211 C. 1903 [1] 1407).
- $C_{11}H_{14}O_5Br_4$  1) Diäthylester d.  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Ketopentan- $\alpha\epsilon$ -Dicarbonsäure. Sm. 171—172° (B. 37, 3297 C. 1904 [2] 1041).
- $C_{11}H_{14}O_5S$  3) Zimmtsäureäthylesterhydrosulfonsäure. K +  $1\frac{1}{2}H_2O$  (B. 37, 4058 C. 1904 [2] 1649).
- 4) 4-Methoxybenzylidenacetonhydrosulfonsäure. Na +  $H_2O$ , K +  $H_2O$  (B. 37, 4051 C. 1904 [2] 1649).
- $C_{11}H_{14}O_6N_2$  1) Dimethyläther d. 2,6-Dinitro-3,4-Dioxy-1-Propylbenzol. Sm. 66,5° (B. 36, 862 C. 1903 [1] 1085).
- 2) Methyl ester d. p-Dinitro-1-Isopropyl-p-Dihydrobenzol-4-Carbonsäure (M. 25, 470 C. 1904 [2] 333).
- $C_{11}H_{14}O_6N_2$  2) Verbindung (aus Formaldehyd u. Nitromalonsäureamid). Sm. 46° (G. 33 [1] 380 C. 1903 [2] 579).
- $C_{11}H_{14}N_2S$  15) 2-Phenylimido-5-Aethyltetrahydrothiazol. Sm. 89—90° (B. 37, 2481 C. 1904 [2] 419).
- $C_{11}H_{14}N_3Cl$  1) 2-Chlormethylat d. 5-Amido-3-Methyl-1-Phenylpyrazol. Sm. 192°. 2 +  $PtCl_4$  (B. 36, 3284 C. 1903 [2] 1190).
- $C_{11}H_{14}N_3Br$  3) 2-Brommethylat d. 5-Amido-3-Methyl-1-Phenylpyrazol. Sm. 196° (B. 36, 3284 C. 1903 [2] 1190).
- $C_{11}H_{14}Cl_4J_2$  1)  $\alpha\beta$ -Dichloräthyl-4-Methyl-2-Aethylphenyljodoniumjodid. Sm. 96° (J. pr. [2] 69, 447 C. 1904 [2] 590).
- $C_{11}H_{14}Cl_3J$  2)  $\alpha\beta$ -Dichloräthyl-4-Methyl-2-Aethylphenyljodoniumchlorid. Sm. 171° u. Zers. +  $HgCl_2$ , 2 +  $PtCl_4$  (J. pr. [2] 69, 446 C. 1904 [2] 590).
- $C_{11}H_{15}ON$  \*26) Aldehyd d. 4-Diäthylamidobenzol-1-Carbonsäure. Sm. 41° (B. 37, 861 C. 1904 [1] 1206).
- \*37) Diäthylamid d. Benzolcarbonsäure. Sd. 164—165°<sub>27</sub> (J. pr. [2] 68, 354 C. 1903 [2] 1318; B. 37, 2815 C. 1904 [2] 648).
- \*70) Isobutylamid d. Benzolcarbonsäure. Sm. 54° (C. r. 135, 974 C. 1903 [1] 232).
- 75) Aethyläther d.  $\alpha$ -Aethylimido- $\alpha$ -Oxy- $\alpha$ -Phenylmethan. Sd. 221 bis 223°<sub>80</sub> (Soc. 83, 321 C. 1903 [1] 580, 876).
- 76) Nitril (aus Carvon). Sm. 93,5—94,5° (C. 1904 [1] 1082).
- $C_{11}H_{15}ON_3$  19)  $\gamma$ -Semicarbazon- $\alpha$ -Phenylbutan. Sm. 142° (B. 37, 2313 C. 1904 [2] 217).
- 20)  $\alpha$ -Semicarbazon- $\beta$ -[4-Methylphenyl]propan. Sm. 152° (C. r. 137, 1261 C. 1904 [1] 445).
- 21) 2-Methylhydroxyd d. 5-Amido-3-Methyl-1-Phenylpyrazol. Salze siehe (B. 36, 3284 C. 1903 [2] 1190).
- $C_{11}H_{15}O_2N$  82) 4-Nitro-1-tert. Amylbenzol. Sd. 152—154°<sub>16</sub> (A. 327, 224 C. 1903 [1] 1408).
- 83) 1-Keto-4-Acetyl-2-[ $\alpha$ -Amidoäthyliden]-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 136° (B. 36, 2161 C. 1903 [2] 370).
- 84) 4-Methyläther d.  $\alpha$ -Oximido- $\alpha$ -[4-Oxy-2-Methylphenyl]propan. Sm. 94—95° (B. 37, 3993 C. 1904 [2] 1640).
- 85) 4-Methyläther d.  $\alpha$ -Oximido- $\alpha$ -[4-Oxy-3-Methylphenyl]propan. Sm. 99° (B. 37, 3991 C. 1904 [2] 1640).
- 86) 6-Methyläther d.  $\alpha$ -Oximido- $\alpha$ -[6-Oxy-3-Methylphenyl]propan. Sm. 92° (B. 37, 3994 C. 1904 [2] 1640).
- 87) 2-Aethyläther d.  $\alpha$ -Oximido- $\alpha$ -[2-Oxy-4-Methylphenyl]äthan. Sm. 132° (C. 1904 [1] 1597).
- 88) Campherchinoncyanhydrin. K +  $xH_2O$  (Soc. 85, 1210 C. 1904 [2] 1119).
- 89) 2-Diäthylamidobenzol-1-Carbonsäure. Sm. 120—121°. + HJ (M. 25, 487 C. 1904 [2] 325).

- $C_{11}H_{15}O_2N$  90) Aethylester d.  $r$ - $\alpha$ -Amido- $\beta$ -Phenylpropionsäure. *Sd.* 143°<sub>10</sub>. *HCl*, *HNO*<sub>3</sub>, *Pikrat* (*B.* 34, 450; *B.* 37, 1266 *C.* 1904 [1] 1333).
- 91) Aethylester d. Aethylphenylamidoameisensäure. *Sd.* 130—130,5°<sub>14</sub> (*B.* 36, 2477 *C.* 1903 [2] 559).
- 92) Phenylester d. Diäthylamidoameisensäure. *Sd.* 150°<sub>15</sub> (270—271°) (*Bl.* [3] 31, 20 *C.* 1904 [1] 508; *Bl.* [3] 31, 691 *C.* 1904 [2] 198).
- 93) Dimethylamid d. 3-Oxybenzoläthyläther-1-Carbonsäure. *Fl.* (*A.* 329, 71 *C.* 1903 [2] 1440).
- $C_{11}H_{15}O_2N_3$  22)  $\gamma$ -[4-Nitrophenyl]hydrazonpentan. *Sm.* 139—139,5° (141°) (*B.* 36, 703 *C.* 1903 [1] 818; *R.* 22, 435 *C.* 1904 [1] 15).
- 23) Methyläther d.  $\beta$ -Semicarbazon- $\alpha$ -[4-Oxyphenyl]propan. *Sm.* 175° (*A.* 332, 324 *C.* 1904 [2] 651).
- 24) Acetylphenyläthylsemicarbazid. *Sm.* 92° (*B.* 36, 1378 *C.* 1903 [1] 1344).
- $C_{11}H_{15}O_2Br$  \*1) Formylbromcampher. *Sm.* 40—42° (*B.* 37, 2175 *C.* 1904 [2] 223).
- $C_{11}H_{15}O_2J$  2) Formyljodcampher. *Sm.* 67—68° (*B.* 37, 2163 *C.* 1904 [2] 221).
- $C_{11}H_{15}O_3N$  \*9) Methylester d. 3-Dimethylamido-4-Oxybenzomethyläther-1-Carbonsäure. *Sd.* 288°. *HJ* (*A.* 325, 325 *C.* 1903 [1] 770).
- 34)  $\beta$ ,4-Dimethyläther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\beta$ -[4-Oxyphenyl]propan. *Sm.* 48—49°. *HCl* (*A.* 332, 328 *C.* 1904 [2] 651).
- 35) Aethylester d. 6-Oxy-2-Methyl-5-Aethylpyridin-3-Carbonsäure. *Sm.* 190° (*G.* 33 [2] 168 *C.* 1903 [2] 1283).
- 36) Aethylester d. 6-Oxy-2,5-Dimethylpyridin-6-Methyläther-3-Carbonsäure +  $H_2O$ . *Sm.* 80° (wasserfrei) (*G.* 33 [2] 169 *C.* 1903 [2] 1283).
- $C_{11}H_{15}O_3N_3$  7) Monosemicarbazon d. 3-Oxy-5-Isopropyl-2-Methyl-1,4-Benzochinon. *Sm.* 214—217° (*A.* 336, 29 *C.* 1904 [2] 1467).
- 8) Dimethyläther d.  $\alpha$ -Semicarbazon- $\alpha$ -[2,5-Dioxyphenyl]äthan. *Sm.* 181—182° (*B.* 37, 3996 *C.* 1904 [2] 1641).
- 9) Dimethyläther d.  $\alpha$ -Semicarbazon- $\alpha$ -[3,5-Dioxyphenyl]äthan. *Sm.* 192° (*B.* 36, 2302 *C.* 1903 [2] 578).
- 10) Aethyläther d.  $\beta$ -[4-Nitrophenyl]hydrazon- $\alpha$ -Oxypropan. *Sm.* 101 bis 102° (*G.* 33 [1] 317 *C.* 1903 [2] 281).
- 11) *p*-Nitro-2-Oxy-1,2,3,5-Tetramethyl-2,3-Dihydrobenzimidazol. *Sm.* 195° (*B.* 36, 3972 *C.* 1904 [1] 178).
- 12) 5-oder-7-Nitro-2-Oxy-1,3,4,6-Tetramethyl-2,3-Dihydrobenzimidazol. *Sm.* 163° (*B.* 36, 3973 *C.* 1904 [1] 178).
- 13)  $\alpha$ -Phenyl- $\gamma$ -Aethylsemicarbazidoessigsäure. *Sm.* 195° (*B.* 36, 3885 *C.* 1904 [1] 27).
- 14) Aethylester d.  $\alpha$ -Phenylsemicarbazidoessigsäure. *Sm.* 123° (*B.* 36, 3884 *C.* 1904 [1] 27).
- 15) Aethylester d.  $\beta$ -Phenylureidomethylamidoameisensäure. *Sm.* 190° (*J. pr.* [2] 70, 251 *C.* 1904 [2] 1464).
- $C_{11}H_{15}O_3N_5$  *C* 49,8 — *H* 5,7 — *O* 18,1 — *N* 26,4 — *M. G.* 265.
- 1) 8-Propionylamido-2,6-Diketo-1,3,7-Trimethylpurin. *Sm.* 220° (*D. R. P.* 139960 *C.* 1903 [1] 859).
- 2) Hydrazid d.  $\beta$ -Phenylureidoacetylamidoessigsäure. *Sm.* 206° u. *Zers.* *HCl* (*J. pr.* [2] 70, 255 *C.* 1904 [2] 1464).
- $C_{11}H_{15}O_3Cl$  2) isom. Chlorcaphoccarbonsäure. *Sm.* 116—117° (*B.* 35, 4118 *C.* 1903 [1] 83).
- $C_{11}H_{15}O_3Br$  \*2) Bromcamphoccarbonsäure. *Sm.* 105—106° (109—110°) (*B.* 36, 1729 *C.* 1903 [2] 37).
- $C_{11}H_{15}O_4N$  6) Dimethyläther d. 4-Nitro-2,5-Dioxy-1-Propylbenzol. *Sm.* 64° (*B.* 36, 856 *C.* 1903 [1] 1084).
- 7) Dimethyläther d. 6-Nitro-3,4-Dioxy-1-Propylbenzol. *Sm.* 81—82° (*B.* 36, 860 *C.* 1903 [1] 1085; *Ar.* 242, 88 *C.* 1904 [1] 1007).
- 8) Diäthyläther d. 2-Nitro-1-Dioxyethylbenzol (*B.* 36, 3653 *C.* 1903 [2] 1332).
- 9) 1-Diäthylamidoformiat d. 1,2,3-Trioxybenzol. *Sm.* 149° (*B.* 37, 109 *C.* 1904 [1] 584).
- $C_{11}H_{15}O_4N_3$  5) 3,5-Dinitro-4-Amido-1-tert. Amylbenzol. *Sm.* 71—72° (*A.* 327, 214 *C.* 1903 [1] 1408).
- $C_{11}H_{15}O_4P$  1) Benzoylderivat d. Methyläthylcarbinolphosphinsäure. *Ag*<sub>2</sub> (*C.* 1904 [2] 1708).

- $C_{11}H_{15}O_6N$  C 51,4 — H 5,8 — O 37,4 — N 5,4 — M. G. 257.  
 1) Diäthylester d. 2,6-Dioxy-1,4-Dihydropyridin-4,4-Dicarbon-  
 säure +  $\frac{1}{2}H_2O$ . Sm. 195—196°. Na +  $2H_2O$ , Ba +  $2H_2O$ , Ag  
 (M. 24, 739 C. 1904 [1] 179).
- $C_{11}H_{15}O_6N_3$  2) 4-Nitrophenylhydrazon d. Arabinose. Sm. 168° (R. 22, 438  
 C. 1904 [1] 15).  
 3) 4-Nitrophenylhydrazon d. Xylose. Sm. 156° (R. 22, 438 C. 1904  
 [1] 15).
- $C_{11}H_{15}O_8N$  C 45,7 — H 5,2 — O 44,3 — N 4,8 — M. G. 289.  
 1) Triäthylester d. Stickstoffcarbonsäurediketocarbonsäure (Aeth-  
 oxalylcarboxäthylloxamäthan). Sd. 182—184°<sub>9-10</sub> (B. 37, 3680 C. 1904  
 [2] 1495).
- $C_{11}H_{15}NS$  7) Phenylamid d. Thioisovaleriansäure (B. 36, 588 C. 1903 [1] 830).  
 $C_{11}H_{15}N_3S$  8)  $\alpha$ -Amido- $\beta$ -Allyl- $\alpha$ -Benzylthioharnstoff. Sm. 61° (B. 37, 2328  
 C. 1904 [2] 313).
- $C_{11}H_{15}ON_2$  \*29) Phenylhydrazid d. Isovaleriansäure. Sm. 104° (C. 1903 [1] 829;  
 M. 24, 568 C. 1903 [2] 887).  
 37)  $\gamma$ -Ureidobutylbenzol. Sm. 119,5° (B. 36, 3000 C. 1903 [2] 949).  
 38)  $\alpha$ -[d-sec. Butyl]- $\beta$ -Phenylharnstoff. Sm. 150° (Ar. 242, 70 C. 1904  
 [1] 999).  
 39) 4-Diäthylamidobenzaldoxim. Sm. 93° (B. 37, 861 C. 1904 [1] 1206).  
 40) Limonen- $\beta$ -Nitrosocyanid. Sm. 90—91° (Soc. 85, 931 C. 1904 [2] 705).  
 41) d-Limonennitrosocyanid. Sm. 90—91° (C. 1904 [2] 440).
- $C_{11}H_{15}O_2N_2$  \*1) Pilocarpin (C. 1903 [1] 1270; Soc. 83, 454 C. 1903 [1] 930, 1143).  
 \*14) Isopilocarpin (Soc. 83, 458 C. 1903 [1] 930, 1143).  
 21) Phenylhydrazid d.  $\alpha$ -Oxy- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 173°  
 (Bl. [3] 31, 124 C. 1904 [1] 644).
- $C_{11}H_{15}O_2N_4$  7) Dimethyläther d. Benzylidendi[ $\alpha$ -Amido- $\alpha$ -Imido- $\alpha$ -Oxymethan].  
 Sm. 137°. 2HCl (C. 1904 [2] 29).
- $C_{11}H_{15}O_2S$  \*5) d-Methyläthylphenacylsulfhydrat. Pikrat, d-Bromcamphersulfonat  
 (Soc. 81, 1557 C. 1903 [1] 23, 144).  
 \*6) l-Methyläthylphenacylsulfhydrat. Pikrat, d-Bromcamphersulfonat  
 (Soc. 81, 1557 C. 1903 [1] 23, 144).
- $C_{11}H_{15}O_3N_2$  8) Aethylester d. 3-Acetyl-4-Methyl-1-Aethylpyrazol-5-Carbonsäure.  
 Sm. 57—58° (B. 36, 1131 C. 1903 [1] 1138).
- $C_{11}H_{15}O_3N_6$  C 47,1 — H 5,7 — O 17,2 — N 30,0 — M. G. 280.  
 1) Anhydro-2,6-Disemicarbazonhexahydrobenzol-1-Propionsäure.  
 Sm. 278° u. Zers. (B. 37, 3825 C. 1904 [2] 1607).
- $C_{11}H_{15}O_5S$  \*1)  $\gamma$ -Phenylpentan- $\beta$ -Sulfonsäure. Ba +  $H_2O$  (B. 36, 3694 C. 1903 [2]  
 1427).  
 \*13) 2-Aethyl-1,3,5-Trimethylbenzol-4-Sulfonsäure. Sm. 78—80°. Na  
 (B. 36, 1644 C. 1903 [2] 27).  
 18)  $\alpha$ -Oxyisobutyl-4-Methylphenylsulfon (Am. 31, 166 C. 1904 [1] 875).  
 19)  $\beta$ -Phenylpentan- $\beta$ -Sulfonsäure. Na, Ba +  $H_2O$  (B. 36, 3689 C. 1903  
 [2] 1426).  
 20)  $\gamma$ -Phenyl- $\beta$ -Methylbutan- $\beta$ -Sulfonsäure. Ba +  $2H_2O$  (B. 36, 3692  
 C. 1903 [2] 1426).  
 21) 4-Isopropyl-1-Aethylbenzol- $\beta$ -Sulfonsäure. Mg +  $4H_2O$ , Zn +  $4H_2O$   
 (B. 36, 1641 C. 1903 [2] 27).  
 22) 5-Aethyl-1,2,4-Trimethylbenzol- $\beta$ -Sulfonsäure. Sm. 70—72° (B. 36,  
 1642 C. 1903 [2] 27).
- $C_{11}H_{15}O_4N_2$  7) Pyrazolon (aus 1-Oxy-5-Keto-1-Methylhexahydrobenzol-2,4-Dicarbon-  
 säurediäthylester). Sm. 203° u. Zers. (A. 332, 16 C. 1904 [1] 1565).  
 8) Aethylester d.  $\alpha$ -Cyan- $\alpha$ -Oxyessig-[ $\beta$ -Cyan- $\alpha$ -Aethoxylpropyl]äther-  
 säure. Sm. 63°; Sd. 220°<sub>20</sub> (C. 1904 [1] 159).  
 9) 3-Nitrobenzoat d. Oximidocampher. Sm. 89—90° (Soc. 85, 906  
 C. 1904 [2] 597).
- $C_{11}H_{15}O_4S$  4)  $\alpha$ -[4-Oxyphenyl]butanmethyläther- $\beta$ -Sulfonsäure (B. 37, 3999  
 C. 1904 [2] 1641).  
 5) 3-Oxy-1-Propylbenzoläthyläther- $\beta$ -Sulfonsäure. Ba (B. 37, 3990  
 C. 1904 [2] 1639).  
 6) 4-Oxy-1-Propylbenzoläthyläther- $\beta$ -Sulfonsäure. Sm. 66—68°. Ba  
 (B. 37, 3991 C. 1904 [2] 1640).

- $C_{11}H_{16}O_4S_2$  2)  $\beta$ -Aethylsulfon- $\beta$ -Phenylsulfonpropan. Sm. 78—80° (B. 36, 303 C. 1903 [1] 500).  
3) 2,4-Di[Aethylsulfon]-1-Methylbenzol (J. pr. [2] 68, 335 C. 1903 [2] 1172).
- $C_{11}H_{16}O_5N_2$  13) Verbindung (aus  $\gamma$ -Amido- $\delta$ -Imidohexan- $\beta\beta\epsilon\epsilon$ -Tetracarbonsäure). Sm. 199° (B. 35, 4127 C. 1903 [1] 136).
- $C_{11}H_{16}O_5Cl_2$  1) Diäthylester d.  $\beta$ -Dichlor- $\gamma$ -Ketopentan- $\alpha\epsilon$ -Dicarbonsäure. Sm. 60—75° (B. 37, 3297 C. 1904 [2] 1041).
- $C_{11}H_{16}O_5Br_2$  1) Diäthylester d.  $\beta\delta$ -Dibrom- $\gamma$ -Ketopentan- $\delta\epsilon$ -Dicarbonsäure. Sm. 48,5—49° (B. 37, 3296 C. 1904 [2] 1041).
- $C_{11}H_{16}NCl$  4) Dimethylallylphenylammoniumjodid. 2 +  $PtCl_4$  (Soc. 85, 413 C. 1904 [1] 1410).
- $C_{11}H_{16}NJ$  \*3) Jodmethylat d. 1-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 173° u. Zers. (B. 36, 2570 C. 1903 [2] 727).  
6) Dimethylallylphenylammoniumjodid. Sm. 86—87° (Soc. 83, 1406 C. 1904 [1] 438; Soc. 85, 412 C. 1904 [1] 1409).
- $C_{11}H_{16}N_2S$  7)  $\alpha$ -[d-sec. Butyl]- $\beta$ -Phenylthioharnstoff. Sm. 88° (Ar. 242, 62 C. 1904 [1] 998).
- $C_{11}H_{17}ON$  21)  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Phenylpropan. Sd. 135—136°<sub>22</sub>. HCl (C. r. 138, 767 C. 1904 [1] 1196).  
22) Dimethylallylphenylammoniumhydroxyd. Jodid, d-Camphersulfonat (Soc. 83, 1406 C. 1904 [1] 438).  
23) d-Bornylisocyanat. Sm. 69° (72°); Sd. 114—116°<sub>14</sub> (C. 1904 [1] 1605; Soc. 85, 687 C. 1904 [2] 332; Soc. 85, 1189 C. 1904 [2] 1125).  
24) Neobornylisocyanat. Sm. 88° (Soc. 85, 1192 C. 1904 [2] 1125).  
25) Methylhydroxyd d. 1-Methyl-1,2,3,4-Tetrahydrochinolin. Pikrat (B. 36, 2570 C. 1903 [2] 727).  
26) Nitril (aus Pulegon). Sm. 160,5° (C. 1904 [1] 1083).
- $C_{11}H_{17}ON_2$  17) Semicarbazon d. Keton  $C_9H_{14}O$  (aus Pinen). Sm. 226—228° u. Zers. (C. 1903 [2] 372; Soc. 83, 1304 C. 1904 [1] 95).
- $C_{11}H_{17}OBr$  2) Brommethylcampher. Sm. 65° (C. r. 136, 752 C. 1903 [1] 971).  
3) Methylbromcampher. Sm. 61° (C. r. 136, 752 C. 1903 [1] 971).
- $C_{11}H_{17}O_2N$  \*6) N-Methyläther d. Oximidocampher. Sd. 233°<sub>480</sub> u. Zers. (Soc. 85, 896 C. 1904 [2] 331, 596).  
20) Dimethyläther d. 4-Amido-2,5-Dioxy-1-Propylbenzol. Sm. 94° (B. 36, 857 C. 1903 [1] 1084).  
21) Dimethyläther d. 6-Amido-3,4-Dioxy-1-Propylbenzol. Sm. 59°; Sd. 169°<sub>10</sub> (B. 36, 860 C. 1903 [1] 1085).  
22) O-Methyläther d. Oximidocampher. Sm. 107° (Soc. 85, 894 C. 1904 [2] 331, 596).  
23) 2,5-Dimethyl-1-Butylpyrrol-3-Carbonsäure. Sm. 154° (C. 1903 [2] 1281).  
24) Äthylester d. 2,5-Dimethyl-1-Äthylpyrrol-3-Carbonsäure. Sd. 286°<sub>748</sub> (C. 1903 [2] 1281).
- $C_{11}H_{17}O_2N_2$  \*2) Monosemicarbazon d. Campherchinon. Sm. 229° (B. 36, 3190 C. 1903 [2] 939).  
3) 5-Nitro-3,4-Diamido-1-tert. Amylbenzol. Sm. 82—83° (A. 327, 215 C. 1903 [1] 1408).  
4)  $\beta$ -[5-Semicarbazon-3-Keto-4-Methylhexahydrophenyl]propen. Sm. 235° (A. 330, 270 C. 1904 [1] 947).
- $C_{11}H_{17}O_2Br$  2) Formylbrommenthon. Fl. (B. 37, 2176 C. 1904 [2] 223).  
3) Äthylester d. Brom- $\beta$ -Campholytsäure. Sd. 164—168°<sub>40</sub> (Soc. 83, 860 C. 1903 [2] 573).
- $C_{11}H_{17}O_3N$  33) Benzoat d. Oximidocampher. Sm. 136° (Soc. 83, 527 C. 1903 [1] 234, 1353; Soc. 85, 906 C. 1904 [2] 597).  
34) Benzoat d. isom. Oximidocampher. Sm. 105—106° (Soc. 83, 526 C. 1903 [1] 234, 1353).
- $C_{11}H_{17}O_4N$  \*5) Diäthylester d.  $\alpha$ -Cyan- $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure (C. 1903 [1] 923; Soc. 85, 134 C. 1904 [1] 727).  
10)  $\epsilon$ -Äthylester d.  $\gamma$ -Cyan- $\beta$ -Methylpentan- $\beta\epsilon$ -Dicarbonsäure. Sd. 245—250°<sub>50</sub> (Soc. 85, 138 C. 1904 [1] 728).
- $C_{11}H_{17}O_4P$  3) Säure (aus d. Säure  $C_4H_{11}O_3P$  u. Benzaldehyd) (C. r. 136, 235 C. 1903 [1] 564).
- $C_{11}H_{17}ClSi$  1) Siliciumäthylpropylphenylchlorid. Sd. 240° (C. 1904 [1] 637).

- $C_{11}H_{18}O_2N_2$  \*3) Nitril d. Phoronsäure (*Soc.* 83, 999 *C.* 1903 [2] 373, 666).  
 7) O-Methyläther d. Oximidocampheroxim. Sm. 188° (*Soc.* 85, 896 *C.* 1904 [2] 331, 596).  
 8) Inn. Anhydrid d. i-1-[ $\alpha$ -Amidoisocapronyl]tetrahydropyrrol-2-Carbonsäure (Leucylpyrolinanhydrid). Sm. 117–121° (*B.* 37, 3075 *C.* 1904 [2] 1210).  
 9) Aethylester d. Cykloheptanopyrazolincarbonsäure. HCl (*B.* 37, 937 *C.* 1904 [1] 1072).
- $C_{11}H_{18}O_2Br_2$  3) Aethylester d. Dibromdihydro- $\beta$ -Campholysäure. Fl. (*Soc.* 83, 860 *C.* 1903 [2] 573).
- $C_{11}H_{18}NJ$  11) Dimethylpropylphenylammoniumjodid. Sm. 68,5° (*Soc.* 83, 1407 *C.* 1904 [1] 438).
- $C_{11}H_{19}ON$  \*3) Formylbornylamin (*Soc.* 85, 1193 *C.* 1904 [2] 1125).  
 \*7) Methylamidocampher. Sd. 237–238°<sub>760</sub>. (2HCl, PtCl<sub>4</sub>) (*Soc.* 85, 898 *C.* 1904 [2] 596).  
 10) Methyl- $\alpha$ -Anhydropulegonhydroxylamin. Sd. 102–104°. Pikrat (*B.* 37, 955 *C.* 1904 [1] 1087).  
 11) l-Menthylisocyanat. Sd. 108–110°<sub>10–13</sub> (*Soc.* 85, 688 *C.* 1904 [2] 332).
- $C_{11}H_{19}ON_3$  \*13) r-4-Semicarbazon-2-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 177–178° (*A.* 336, 38 *C.* 1904 [2] 1468).  
 \*25) Semicarbazon d.  $\beta$ -Cyklocitral. Sm. 166° (D.R.P. 138141 *C.* 1903 [1] 267).  
 33) 3-Semicarbazon-5-Isopropyl-2-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 171–173° (*B.* 28, 1588). — \*III, 385.  
 34) 4-Semicarbazon-5-Isopropyl-2-Methyl-1,2,3,4-Tetrahydrobenzol (Semicarbazou d. Menthonon). Sm. 135–136° (*C.* 1903 [2] 1373).  
 35) l-4-Semicarbazon-2-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 173° (*A.* 336, 38 *C.* 1904 [2] 1468).  
 36) Semicarbazon d.  $\alpha$ -Cyklocitral. Sm. 204° (D.R.P. 138141 *C.* 1903 [1] 267).  
 37) Semicarbazon d. Calaminthon. Sm. 165° (*C. r.* 136, 388 *C.* 1903 [1] 714).  
 38) Semicarbazon d. Keton  $C_{10}H_{16}O$  (aus Terpinennitrosit). Sm. 173° (*A.* 313, 363). — \*III, 386.  
 39) Semicarbazon d. Keton  $C_{10}H_{16}O$ . Sm. 171–172° (*Soc.* 85, 643 *C.* 1904 [1] 1608; *C.* 1904 [2] 330).  
 40) Semicarbazon d. Aldehyd  $C_{10}H_{16}O$  (aus Pinen). Sm. 191° (*C.* 1903 [2] 372; *Soc.* 83, 1303 *C.* 1904 [1] 95).
- $C_{11}H_{19}O_2N$  13) Amidoformiat d. Geraniol. Sm. 124° (D.R.P. 58129). — \*III, 345.
- $C_{11}H_{19}O_2N_3$  \*6) 4-Semicarbazon-6-Oxy-5-Methyl-2-Isopropyl-1,2,3,4-Tetrahydrobenzol. Sm. 175–176° (*B.* 36, 3576 *C.* 1903 [2] 1362).
- $C_{11}H_{19}O_2Br$  4) Aethylester d. 2-Brom-1,1,2-Trimethyl-R-Pentamethylen-5-Carbonsäure. Sd. 165–170°<sub>70</sub> (*Soc.* 85, 145 *C.* 1904 [1] 728).
- $C_{11}H_{19}O_3N_3$  12)  $\alpha$ -[3-Semicarbazon-4-Methylhexahydrophenyl]propionsäure. Sm. 178–179° (*B.* 36, 769 *C.* 1903 [1] 836).  
 13) Hexahydrobenzylester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 182° (*C. r.* 138, 985 *C.* 1904 [1] 1398).
- $C_{11}H_{19}O_4N_3$  3) 2,5-Diketo-4,4-Dimethyl-1-Aethyltetrahydroimidazol-3- $\alpha$ -Amidoisobuttersäure. Sm. 140° (*C.* 1904 [2] 1029).
- $C_{11}H_{19}O_4Cl$  3) Diäthylester d.  $\gamma$ -Chlor- $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Fl. (*Soc.* 83, 17 *C.* 1903 [1] 443).
- $C_{11}H_{19}O_5N_3$  \*2)  $\beta$ -Antipepton ( $\beta$ -Trypsinfibrinpepton) (*H.* 38, 258, 269 *C.* 1903 [2] 210).  
 $C_{11}H_{19}O_5N_3$  C 45,7 — H 6,6 — O 33,2 — N 14,5 — M. G. 289.  
 1) Diäthylester d. Carboxylamidoacetylamidoacetylamidoessigsäure ( $\alpha$ -Carboxyl- $\beta$ -Carbäthoxyldiglycylglycinäthylester). Sm. 148–150° (*B.* 36, 2102 *C.* 1903 [1] 1304).  
 2) isom. Diäthylester d. Carboxylamidoacetylamidoacetylamidoessigsäure ( $\beta$ -Carbäthoxyldiglycylglycinäthylester). Sm. 148–150° (*B.* 36, 2102 *C.* 1903 [1] 1304).
- $C_{11}H_{19}O_6N_3$  C 41,6 — H 6,0 — O 30,3 — N 22,1 — M. G. 317.  
 1) Amid d. Carboxylamidoacetylamidoacetylamidoessigsäure-N-Aethylester (Carbäthoxyltriglycylglycinamid). Sm. 275° u. Zers. (*B.* 36, 2104 *C.* 1903 [1] 1304).

- $C_{11}H_{19}NS_2$  2) Bornylamidodithioameisensäure. Bornylaminsalz (*C.* 1904 [1] 1605; *Soc.* 85, 1194 *C.* 1904 [2] 1125).
- $C_{11}H_{20}ON_2$  \*2) d-Bornylharnstoff.  $HNO_3$ ,  $H_2SO_4$  (*Soc.* 85, 1189 *C.* 1904 [2] 1125).
- $C_{11}H_{20}ON_4$  2) Semicarbazon d.  $\alpha$ -Anhydropulegonhydroxylamin. Sm. 153—154° (*B.* 37, 954 *C.* 1904 [1] 1087).
- $C_{11}H_{20}O_3N_2$  2) i-1-[ $\alpha$ -Amidoisocapro]yltetrahydropyrrol-2-Carbonsäure (i-Leucylpyrrolin). Sm. 116—119° (*B.* 37, 3074 *C.* 1904 [2] 1209).
- $C_{11}H_{20}O_4N_2$  2) Aethylester d.  $\delta$ , $\delta$ -Diamido- $\beta$ , $\eta$ -Diketooctan- $\gamma$ -Carbonsäure. Sm. 35° (*A.* 332, 140 *C.* 1904 [2] 191).
- $C_{11}H_{20}O_5N_2$  2)  $\alpha$ -Carbäthoxylamidoacetyl-amido- $\gamma$ -Methylvaleriansäure. Sm. 135,5 bis 136,5° (*B.* 36, 2602 *C.* 1903 [2] 619).
- $C_{11}H_{21}ON$  14)  $\delta$ -Oximido- $\delta$ -Hexahydrophenyl- $\beta$ -Methylbutan. Sm. 77° (*C. r.* 139, 345 *C.* 1904 [2] 704).
- $C_{11}H_{21}ON_8$  15) d-P-Menthylamid d. Ameisensäure. Sm. 117—118° (*C.* 1904 [2] 1046).
- 15)  $\delta$ -Semicarbazon- $\beta$ , $\zeta$ -Dimethyl- $\beta$ -Okten (Semicarbazon d. Rhodinal). Sm. 115° (*C. r.* 122, 737). — \*III, 350.
- 16) Semicarbazon d. P-Menthon. Sm. 187—188° (*C.* 1904 [2] 1046).
- $C_{11}H_{21}O_2N$  9)  $\gamma$ -Oximido- $\beta$ -Keto- $\delta$ -Methyldekan. Sd. 147—149°<sub>10</sub> (*Bl.* [3] 31, 1168 *C.* 1904 [2] 1701).
- 10) Methylester d. 1,2,2,5,5-Pentamethyltetrahydropyrrol-3-Carbonsäure. Sd. 218° (*HJ.* (*B.* 36, 3361 *C.* 1903 [2] 1185).
- 11) Methylester d. d-2-Propylhexahydro-1-Pyridylelessigsäure. Sd. 244 bis 245° (*B.* 37, 3637 *C.* 1904 [2] 1510).
- 12) Aethylester d. 2,2,5,5-Tetramethyltetrahydropyrrol-3-Carbonsäure. Sd. 217°<sub>748</sub> (*B.* 36, 3360 *C.* 1903 [2] 1185).
- $C_{11}H_{21}O_2Br$  3) Aethylester d.  $\alpha$ -Bromoktan- $\alpha$ -Carbonsäure. Sm. 23—24° (*C. r.* 138, 698 *C.* 1904 [1] 1066).
- $C_{11}H_{21}O_3N$  5) Monamid d. cis- $\beta$ , $\zeta$ -Dimethylheptan- $\gamma$ , $\delta$ -Dicarbonsäure. Sm. 146°. Ag (*Am.* 30, 238 *C.* 1903 [2] 934).
- $C_{11}H_{21}O_3N_3$  8) 2-Semicarbazon-4-[ $\alpha$ , $\beta$ -Dioxyisopropyl]-1-Methylhexahydrobenzol. Sm. 187° (*B.* 28, 2705). — \*III, 375.
- 9)  $\alpha$ -Semicarbazon- $\beta$ -Methyloktan- $\alpha$ -Carbonsäure. Sm. 121—121,5 (*Bl.* [3] 31, 1153 *C.* 1904 [2] 1707).
- $C_{11}H_{21}O_6N$  C 50,2 — H 8,0 — O 36,5 — N 5,3 — M. G. 263.
- 1)  $\delta$ -[ $\beta$ , $\gamma$ , $\delta$ , $\zeta$ -Pentaoxyhexyl]imido- $\beta$ -Ketopentan (Acetylacetonmannamin). Sm. 172° (*C. r.* 138, 505 *C.* 1904 [1] 872).
- 2) Acetylacetonglukamin. Sm. 172° (*C.* 1904 [1] 431).
- $C_{11}H_{22}ON_2$  12) Amid d.  $\varepsilon$ -Dimethylamido- $\beta$ , $\varepsilon$ -Dimethyl- $\beta$ -Hexen- $\gamma$ -Carbonsäure. Sm. 98°; Sd. 170°<sub>13</sub> (*B.* 36, 3363 *C.* 1903 [2] 1186).
- $C_{11}H_{22}O_2N_6$  2)  $\delta$ -Semicarbazon- $\zeta$ -Semicarbazido- $\beta$ , $\zeta$ -Dimethyl- $\beta$ -Hepten. Sm. 221° (*B.* 36, 4332 *C.* 1904 [1] 455).
- 3) Campherphoronsemicarbazon + Semicarbazid. Sm. 135°. Pikrat (*A.* 331, 327 *C.* 1904 [1] 1567).
- $C_{11}H_{23}ON$  \*3)  $\beta$ -Oximidoundekan. Sm. 46—47° (*Soc.* 81, 1593 *C.* 1903 [1] 29, 162).
- 15)  $\alpha$ -Oximidoundekan. Sm. 72° (*Bl.* [3] 29, 1206 *C.* 1904 [1] 355).
- 16) 3,4,4,6-Tetramethyl-2-Isopropyltetrahydro-1,3-Oxazin. Sd. 190 bis 194°<sub>750</sub>. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*M.* 25, 856 *C.* 1904 [2] 1240).
- 17) Diisoamylamid d. Ameisensäure. Sd. 132—132,6° (*B.* 36, 2476 *C.* 1903 [2] 559).
- $C_{11}H_{25}ON_3$  2)  $\delta$ -Semicarbazonmethyl- $\beta$ , $\zeta$ -Dimethylheptan. Sm. 140° (*Bl.* [3] 31, 306 *C.* 1904 [1] 1133).
- $C_{11}H_{24}O_4S_2$  3) Di[Isomylsulfon]methan. Sm. 138—139° (*B.* 36, 298 *C.* 1903 [1] 499).
- $C_{11}H_{24}O_6S_3$  1)  $\beta$ , $\delta$ -Triäthylsulfonpentan. Sm. 106° (*B.* 37, 504 *C.* 1904 [1] 882).
- $C_{11}H_{24}N_2S$  4)  $\alpha$ -[d-sec. Butyl]- $\beta$ -Hexylthioharnstoff. Fl. (*Ar.* 242, 61 *C.* 1904 [1] 998).
- $C_{11}H_{26}O_4P$  1) Säure (aus Oenanthaldehyd). Sm. 147° (*C. r.* 128, 1708 *C.* 1904 [2] 422).
- $C_{11}H_{25}ClS$  \*1) Methyldiamylsulfinchlorid (*J. pr.* [2] 66, 464 *C.* 1903 [1] 561).

- $C_{11}H_7O_2NBr_4$  1) Tetrabromisopropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 155,5 bis 156,5° (Sachs, Dissert., Berlin 1898). — \*II, 1053.
- $C_{11}H_7O_2N_2Br_3$  1) 2,6-Dibrom-4-Nitrophenylpyridoniumbromid. Zers. oberh. 280°. + Br<sub>2</sub> (*J. pr.* [2] 70, 36 *C.* 1904 [2] 1235).

- $C_{11}H_7O_3NS_2$  1) 3,4-Methylenäther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Zers. bei 245° (*M.* 24, 516 *C.* 1903 [2] 837).
- $C_{11}H_7O_3N_2Br$  1) Amid d.  $\alpha$ -Cyan- $\beta$ -Brom- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 245° (*C.* 1903 [2] 715).
- $C_{11}H_7NClBr_3$  1) Brom-4-Chlor-2,6-Dibromphenylat d. Pyridin. Sm. 270—271° u. Zers. +  $Br_2$  (*A.* 333, 339 *C.* 1904 [2] 1151).
- $C_{11}H_7NCl_2Br_2$  1) Chlor-4-Chlor-2,6-Dibromphenylat d. Pyridin. 2 +  $PtCl_4$  (*A.* 333, 339 *C.* 1904 [2] 1151).
- $C_{11}H_8ONCl$  5) 1-Naphtylechloramid d. Ameisensäure. Sm. 63° (*Am.* 29, 307 *C.* 1903 [1] 1166).
- 6) 2-Naphtylechloramid d. Ameisensäure. Sm. 75° (*Am.* 29, 307 *C.* 1903 [1] 1166).
- $C_{11}H_8ONBr_3$  1) 2,4,6-Tribromphenylhydroxyd d. Pyridin. Salze siehe (*A.* 333, 336 *C.* 1904 [2] 1151).
- $C_{11}H_8O_3N_2Br_2$  2)  $s$ -[2,6-Dibrom-4-Nitrophenyl]imido- $\alpha$ -Oxy- $\alpha\gamma$ -Pentadien. Sm. 165—166° u. Zers. (*J. pr.* [2] 70, 38 *C.* 1904 [2] 1235).
- $C_{11}H_8O_3N_2S_2$  1) 2-Thiocarbonyl-4-Keto-5-[3-Nitrobenzyliden]-3-Methyltetrahydrothiazol. Sm. 233° (*M.* 25, 170 *C.* 1904 [1] 895).
- 2) 2-Thiocarbonyl-4-Keto-5-[4-Nitrobenzyliden]-3-Methyltetrahydrothiazol. Sm. 205° (*M.* 25, 171 *C.* 1904 [1] 895).
- $C_{11}H_8O_4N_2S$  1) 1,3-Naphtylenharnstoff-6-Sulfonsäure (D.R.P. 146914 *C.* 1903 [2] 1486).
- 2) 2-Phenylimido-4-Ketotetrahydrothiazol-5-Ketocarbonsäure. Sm. 221—222°.  $Ag_2$  (*C.* 1903 [1] 1258).
- $C_{11}H_8O_4N_3Cl$  \* 1) 2,4-Dinitrochlorphenylat d. Pyridin. Sm. 201° (190°). 2 +  $PtCl_4$  (*J. pr.* [2] 68, 259 *C.* 1903 [2] 1064; *A.* 330, 361 *C.* 1904 [2] 1147; *A.* 333, 296 *C.* 1904 [2] 1147).
- $C_{11}H_8O_4N_3Br$  1) 2,4-Dinitrobromphenylat d. Pyridin. Sm. 225° u. Zers. +  $Br_2$  (*A.* 333, 299 *C.* 1904 [2] 1147).
- $C_{11}H_8O_4N_3J$  1) 2,4-Dinitrojodphenylat d. Pyridin. +  $J_2$  (*A.* 333, 300 *C.* 1904 [2] 1147).
- $C_{11}H_8O_4N_6S$  1) 7-Phenylazo-6-Ketopurin-7<sup>4</sup>-Sulfonsäure. Sm. noch nicht bei 270° (*B.* 37, 705 *C.* 1904 [1] 1562).
- $C_{11}H_8O_6N_6S$  1) 7-Phenylazo-2,6-Diketopurin-7<sup>4</sup>-Sulfonsäure. Sm. noch nicht bei 265° (*B.* 37, 703 *C.* 1904 [1] 1562).
- $C_{11}H_9ONS_2$  1) 2-Thiocarbonyl-4-Keto-5-Benzyliden-3-Methyltetrahydrothiazol. Sm. 169° (*M.* 25, 169 *C.* 1904 [1] 895).
- $C_{11}H_9ON_2S_2$  2) Benzoylchrysean. Sm. 212—213° u. Zers. (*B.* 36, 3547 *C.* 1903 [2] 1379).
- $C_{11}H_9O_2NS_2$  1) Methyläther d. 2-Thiocarbonyl-4-Keto-5-[4-Oxybenzyliden]tetrahydrothiazol. Sm. 130—142° u. Zers. (*M.* 24, 515 *C.* 1903 [2] 837).
- $C_{11}H_9O_2N_2Cl$  3) Chlor-3-Nitrophenylat d. Pyridin. 2 +  $PtCl_4$ , +  $AuCl_3$  (*J. pr.* [2] 70, 41 *C.* 1904 [2] 1235).
- 4) Chlor-4-Nitrophenylat d. Pyridin. +  $FeCl_3$ , 2 +  $PtCl_4$ , +  $AuCl_3$  (*J. pr.* [2] 70, 30 *C.* 1904 [2] 1234).
- 5) 5-Chlor-3-Methyl-1-Phenylpyrazol-1<sup>2</sup>-Carbonsäure. Sm. 169°.  $Ca$ ,  $Ba$  +  $3H_2O$  (*B.* 37, 2230 *C.* 1904 [2] 228).
- 6) 3-Cyanphenylmonamid d. Bernsteinsäuremonochlorid. Sm. 80° (*C.* 1904 [2] 103).
- $C_{11}H_9O_2N_2Br$  2) Brom-3-Nitrophenylat d. Pyridin. Sm. 220—230°. +  $FeCl_3$  (*J. pr.* [2] 70, 40 *C.* 1904 [2] 1235).
- 3) Brom-4-Nitrophenylat d. Pyridin. +  $FeCl_3$  (*J. pr.* [2] 70, 31 *C.* 1904 [2] 1234).
- $C_{11}H_9O_4N_7S$  1) 7-Phenylazo-2-Amido-6-Ketopurin-7<sup>4</sup>-Sulfonsäure. Sm. noch nicht bei 270° (*B.* 37, 705 *C.* 1904 [1] 1562).
- $C_{11}H_{10}ONCl$  10) 2-Chlorphenylhydroxyd d. Pyridin. Salze siehe (*A.* 333, 334 *C.* 1904 [2] 1150).
- 11) 4-Chlorphenylhydroxyd d. Pyridin. Salze siehe (*A.* 333, 332 *C.* 1904 [2] 1150).
- 12) 1-Chlor-4-Oxy-3-Aethylisochinolin. Sm. 124—125° (*B.* 37, 1693 *C.* 1904 [1] 1525).

- $C_{11}H_{10}ONBr$  \*4) Äthyläther d. 5-Brom-6-Oxychinolin. Sm. 80—81° (*B.* 36, 459 *C.* 1903 [1] 590).
- $C_{11}H_{10}ON_2Br_2$  1) 6,8-Dibrom-4-Keto-2-Propyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 238—240° (*C.* 1903 [2] 1195).  
2) 6,8-Dibrom-4-Keto-2-Isopropyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 259—260° (*C.* 1903 [2] 1195).  
3) 6,8-Dibrom-4-Keto-2-Methyl-3-Äthyl-3,4-Dihydro-1,3-Benzdiazin. Zers. bei 170° (*C.* 1903 [2] 1194).
- $C_{11}H_{10}ON_2S$  6) Methyläther d. 2-Merkapto-4-Keto-6-Phenyl-3,4-Dihydro-1,3-Diazin. Sm. 240° (*Am.* 29, 490 *C.* 1903 [1] 1310).
- $C_{11}H_{10}O_2NBr$  4) Methyläther d. 5-Brom-6-Oxy-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 168—170° (*B.* 36, 461 *C.* 1903 [1] 590).
- $C_{11}H_{10}O_2NJ$  \*3) Jodmethylat d. Chinolin-4-Carbonsäure. Sm. 222° u. Zers. (*M.* 24, 201 *C.* 1903 [2] 48).
- $C_{11}H_{10}O_2N_2Br_2$  4) 2-Dibrom-3-Nitro-2-Methyl-1-Äthylindol. Sm. 203° (*G.* 34 [2] 63 *C.* 1904 [2] 710).
- $C_{11}H_{10}O_2N_2S$  4) Äthylester d. 5-Phenyl-1, 2, 3-Thiodiazol-4-Carbonsäure. Sm. 42° (*A.* 333, 4 *C.* 1904 [2] 780).
- $C_{11}H_{10}O_3NBr$  5) Äthylester d. 5-Brom-3-Oxyindol-2-Carbonsäure. Sm. 152—154° (*D.R.P.* 138845 *C.* 1903 [1] 547).
- $C_{11}H_{10}O_3N_6S$  1) 7-Phenylazo-6-Amidopurin-7<sup>1</sup>-Sulfonsäure. Sm. noch nicht bei 270° (*B.* 37, 706 *C.* 1904 [1] 1563).
- $C_{11}H_{10}O_4N_2S$  1) Monoformyl-1, 4-Diamidonaphtalin-6- oder -7-Sulfonsäure (*D.R.P.* 138030, 138031 *C.* 1903 [1] 109).
- $C_{11}H_{10}O_6N_8Cl_3$  1) Verbindung (aus d. Verb.  $C_{11}H_{10}O_6N_8$ ). Sm. 95° u. Zers. (*A.* 333, 310 *C.* 1904 [2] 1148).
- $C_{11}H_{10}O_6N_8Cl_5$  1) Verbindung (aus d. Verb.  $C_{11}H_{10}O_6N_8Cl_3$ ) (*A.* 333, 311 *C.* 1904 [2] 1148).
- $C_{11}H_{10}O_6N_4S$  1) 1-Phenylazo-2-Methylimidazol-4[oder 5]-Carbonsäure-1<sup>1</sup>-Sulfonsäure + 2H<sub>2</sub>O. Zers. oberh. 120° (*B.* 37, 702 *C.* 1904 [1] 1562).
- $C_{11}H_{10}O_8NCl$  4) Diacetat d. 4-Chlor-3-Nitro-1-Dioxyethylbenzol. Sm. 97° (*C.* 1899 [1] 836). — \*III, II.  
5) Diacetat d. 4[oder 6]-Chlor-6[oder 4]-Nitro-2,5-Dioxy-1-Methylbenzol. Sm. 105—107° (*A.* 328, 316 *C.* 1903 [2] 1247).
- $C_{11}H_{10}O_8N_8Cl$  1) Diazochlorid d. Iso-β-[2-Nitro-4-Amidophenyl]propan-α-γ-Dicarbonsäure (*B.* 36, 2676 *C.* 1903 [2] 948).
- $C_{11}H_{10}N_2Br_2S$  1) 6,8-Dibrom-4-Thiocarbonyl-2-Methyl-3-Äthyl-3,4-Dihydro-1,3-Benzdiazin. Zers. bei 305° (*C.* 1903 [2] 1195).
- $C_{11}H_{11}ONBr_2$  4) 2-Dibrom-2-Keto-3-Isopropyl-2,3-Dihydroindol. Sm. 142° (*M.* 24, 575 *C.* 1903 [2] 887).
- $C_{11}H_{11}ON_2Br$  \*1) 4-Brom-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 117° (*A.* 331, 231 *C.* 1904 [1] 1220).
- $C_{11}H_{11}ON_8Br_2$  1) 5-Oxy-3-(αβ-Dibrompropyl)-1-Phenyl-1,2,4-Triazol. Sm. 128° (*B.* 36, 1101 *C.* 1903 [1] 1140).
- $C_{11}H_{11}ON_6S$  1) 4-[α-Semicarbazonäthyl]-5-Phenyl-1,2,3-Thiodiazol. Sm. 207° u. Zers. (*A.* 325, 174 *C.* 1903 [1] 645).  
2) 4-[α-Semicarbazonbenzyl]-5-Methyl-1,2,3-Thiodiazol. Sm. 217° u. Zers. (*A.* 325, 173 *C.* 1903 [1] 645).  
3) isom. 4-[α-Semicarbazonbenzyl]-5-Methyl-1,2,3-Thiodiazol. Sm. 140—150° (*A.* 325, 173 *C.* 1903 [1] 645).
- $C_{11}H_{11}O_2N_2Cl$  1) Lakton d. δ-Chlor-α-Phenylhydrazon-γ-Oxyvaleriansäure. Sm. 183—184° (*C. r.* 137, 15 *C.* 1903 [2] 508).
- $C_{11}H_{11}O_2N_8S$  2) Methyläther d. 5-Merkapto-3-Methyl-1-[4-Nitrophenyl]pyrazol. Sm. 135—136° (*A.* 331, 232 *C.* 1904 [1] 1220).
- $C_{11}H_{11}O_3N_2Br$  3) Methyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 81° (*J. pr.* [2] 45, 184, 185). — IV, 265.
- $C_{11}H_{11}O_8N_8S$  1) 2-Phenylimido-5-Oxy-2,3-Dihydro-1,3,4-Thiodiazol-3-[Äthyl-α-Carbonsäure]. Sm. 220° u. Zers. (*C.* 1904 [2] 1027).
- $C_{11}H_{11}O_6BrS$  1) αγ-Sulton d. β-Brom-α-Oxy-α-Phenylbutan-δ-Carbonsäure-γ-Sulfonsäure (*Am.* 31, 253 *C.* 1904 [1] 1081).
- $C_{11}H_{11}N_2BrS$  2) Methyläther d. 4-Brom-5-Merkapto-3-Methyl-1-Phenylpyrazol. Sm. 52° (*A.* 331, 229 *C.* 1904 [1] 1220).
- $C_{11}H_{12}ONCl$  6) Verbindung (aus Chlordimethyläther u. Chinolin). 2 + PtCl<sub>4</sub> (*A.* 334, 54 *C.* 1904 [2] 948).

- $C_{11}H_{12}ONBr$  6) 8-Brom-5-Formylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 164,5° (*Soc.* 85, 745 *C.* 1904 [2] 447).
- $C_{11}H_{12}ON_2S$  18) 2-[2,4-Dimethylphenyl]imido-4-Ketotetrahydrothiazol. Sm. 157° (*C.* 1903 [2] 110).
- 19) 2,4-Dimethylphenylamid d. Rhodanessigsäure. Sm. 98° (*C.* 1903 [2] 110).
- $C_{11}H_{12}ON_2Se$  1) 2,4-Dimethylphenylamid d. Selencyanessigsäure. Sm. 148° (*Ar.* 241, 207 *C.* 1903 [2] 104).
- 2) 2,5-Dimethylphenylamid d. Selencyanessigsäure. Sm. 144—146° (*Ar.* 241, 208 *C.* 1903 [2] 104).
- $C_{11}H_{12}O_2NCl$  5) Methyl-3-Chlor-4-Propionylamidophenylketon. Sm. 115° (*Soc.* 85, 342 *C.* 1904 [1] 1404).
- 6) Methyl-4-Propionylchloramidophenylketon. Sm. 42° (*C.* 1903 [1] 832).
- 7) Äthyl-4-Acetylchloramidophenylketon. Sm. 75° (*C.* 1903 [1] 1223).
- $C_{11}H_{12}O_2NBr$  2) Äthyl-4-Acetylbromamidophenylketon. Sm. 115° (*C.* 1903 [1] 1223).
- 3)  $\alpha$ -oder- $\beta$ -Bromäthyl-4-Acetylamidophenylketon. Sm. 122° (D.R.P. 105199 *C.* 1900 [1] 240). — \* III, 114.
- $C_{11}H_{12}O_2N_2S$  5) 5-Methylsulfon-3-Methyl-1-Phenylpyrazol. Sm. 88—90° (*A.* 331, 228 *C.* 1904 [1] 1220).
- $C_{11}H_{12}O_2N_4S$  2) 1-Ureido-2-Thiocarbonyl-4-Keto-5-Methyl-3-Phenyltetrahydroimidazol. Sm. 206° u. Zers. (*C.* 1904 [2] 1027).
- 3) Amid d. 2-Phenylimido-5-Oxy-2,3-Dihydro-1,3,4-Thiodiazol-3-[Äthyl- $\alpha$ -Carbonsäure]. Sm. 228° u. Zers. (*C.* 1904 [2] 1028).
- $C_{11}H_{12}O_3NCl$  8)  $\alpha$ -Chloracetylamido- $\beta$ -Phenylpropionsäure. Sm. 130—131° (*B.* 37, 3313 *C.* 1904 [2] 1306).
- 9) Acetat d. 5-Chlor-3-Acetylamido-4-Oxy-1-Methylbenzol. Sm. 162—163° (*A.* 328, 313 *C.* 1903 [2] 1247).
- 10) 4-Chlorphenylmonamid d. Propan- $\beta\beta$ -Dicarbonsäure. Sm. 160° (*Soc.* 83, 1248 *C.* 1903 [2] 1420).
- $C_{11}H_{12}O_3NBr$  6) Äthylester d. 4-Brombenzoylamidoessigsäure. Sm. 123° (*B.* 36, 1647 *C.* 1903 [2] 32).
- $C_{11}H_{12}O_3N_3S$  \*4) Thiopyrintrioxyd (*A.* 331, 206 *C.* 1904 [1] 1218).
- $C_{11}H_{12}O_4NCl$  3) 1- $\alpha$ -Chloracetylamido- $\beta$ -[4-Oxyphenyl]propionsäure (1-Chloracetyltyrosin). Sm. 155—156° (*B.* 37, 2494 *C.* 1904 [2] 425).
- $C_{11}H_{12}O_4N_2S$  3) O-Methyläther-S-Äthyläther d. 3-Nitrobenzoylimidomerkaptooxymethan. Sm. 78° (*C.* 1904 [1] 1559).
- $C_{11}H_{12}NBrMg$  1) Chinolinäthylmagnesiumbromid (*B.* 37, 3091 *C.* 1904 [2] 995).
- $C_{11}H_{12}ONS_2$  5) Benzylester d. Acetylmethylamidodithioameisensäure. Sm. 80° (*Bl.* [3] 29, 60 *C.* 1903 [1] 447).
- $C_{11}H_{12}ON_2S$  3) 2-[4-Dimethylamidophenyl]imido-4-Ketotetrahydrothiazol (*C.* 1903 [1] 1258).
- 4) 1-Amido-2-Thiocarbonyl-4-Keto-5-Dimethyl-3-Phenyltetrahydroimidazol. Sm. 173° (*C.* 1904 [2] 1027).
- $C_{11}H_{12}O_2NS_2$  3) Gem. Anhydrid d. 4-Oxybenzylmethyläther-1-Carbonsäure u. Dimethylamidodithioameisensäure (N-Dimethyl-S-Anisoyldithiourethan). Sm. 78—80° (*B.* 36, 3525 *C.* 1904 [2] 1227).
- $C_{11}H_{12}O_3NS$  9) Acetyl-2-Methylphenylamid d. Äthensulfonsäure. Sm. 69° (*B.* 36, 3630 *C.* 1903 [2] 1327).
- 10) Acetyl-4-Methylphenylamid d. Äthensulfonsäure. Sm. 87° (*B.* 36, 3629 *C.* 1903 [2] 1327).
- $C_{11}H_{12}O_3N_2Cl$  3)  $\beta$ -Chlorid d.  $\alpha$ -Phenylhydrazin- $\alpha\beta$ -Dicarbonsäure- $\alpha$ -Äthylester. Fl. (*B.* 36, 3889 *C.* 1904 [1] 28).
- $C_{11}H_{14}ONCl$  11) Nitrosochlorid d.  $\gamma$ -Phenyl- $\beta$ -Penten. Sm. 117° (*B.* 36, 3693 *C.* 1903 [2] 1426).
- 12) Nitrosochlorid d.  $\delta$ -Phenyl- $\beta$ -Methyl- $\beta$ -Buten. Sm. 146—147° (*B.* 37, 2315 *C.* 1904 [2] 217).
- $C_{11}H_{14}O_2NCl$  7) Nitrosochlorid d.  $\alpha$ -[4-Oxy-2-Methylphenyl]propenmethyläther. Sm. 108° (*B.* 37, 3994 *C.* 1904 [2] 1640).
- 8) Nitrosochlorid d.  $\alpha$ -[4-Oxy-3-Methylphenyl]propenmethyläther. Sm. 117° (*B.* 37, 3992 *C.* 1904 [2] 1640).

- $C_{11}H_{14}O_2NCl$  9) Nitrosochlorid d.  $\alpha$ -[3-Oxyphenyl]propenäthyläther. Sm. 122 bis 123° (B. 37, 3990 C. 1904 [2] 1639).
- $C_{11}H_{14}O_2N_2Br_2$  \*1) Dibrompilocarpin (Soc. 83, 461 C. 1903 [1] 930, 1143).
- $C_{11}H_{14}O_2N_2S$  13) 2,4-Dimethylphenylthiohydantoinsäure. Sm. 179° (C. 1903 [2] 110).
- 14) Amid d. Phenylamidothioessigsäure-2-Carbonsäureäthylester. Sm. 188° (D.R.P. 141698 C. 1903 [1] 1244).
- $C_{11}H_{14}O_2N_3Cl$  2) Monosemicarbazon d. 6-Chlor-5-Isopropyl-2-Methyl-1,3-Benzochinon. Sm. 230° (A. 336, 27 C. 1904 [2] 1467).
- $C_{11}H_{14}O_2N_3J$  1) Jodmethylat d. p-Nitro-1,2,5-Trimethylbenzimidazol. Sm. 297° +  $J_2$  (B. 36, 3972 C. 1904 [1] 178).
- 2) Jodmethylat d. p-Nitro-1,4,6-Trimethylbenzimidazol. Sm. 214° +  $J_2$  (B. 36, 3973 C. 1904 [1] 178).
- $C_{11}H_{14}O_2Cl_2S$  1)  $\beta\gamma$ -Dichlor- $\alpha$ -[2,4-Dimethylphenyl]sulfonpropan. Fl. (J. pr. [2] 68, 310 C. 1903 [2] 1115).
- $C_{11}H_{14}O_3NCl$  2) Nitrosochlorid d. 3,4-Dioxy-1-Propenylbenzol-3,4-Dimethyläther. Sm. 110° u. Zers. (A. 332, 336 C. 1904 [2] 652).
- $C_{11}H_{14}O_6N_2S_2$  1) Amid d. 4-Methyl-1,3-Phenylendi[Sulfonessigsäure]. Sm. 230° u. Zers. (J. pr. [2] 68, 338 C. 1903 [2] 1172).
- $C_{11}H_{14}Cl_2BrJ$  1)  $\alpha\beta$ -Dichloräthyl-4-Methyl-2-Aethylphenyljodoniumbromid. Sm. 150° u. Zers. (J. pr. [2] 69, 447 C. 1904 [2] 590).
- $C_{11}H_{15}ONBr_2$  1) Diäthyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 141–142° (A. 332, 221 C. 1904 [2] 203).
- $C_{11}H_{15}ONS$  8) 4-Aethoxyphenylamid d. Thiopropionsäure. Sm. 74–75° (B. 37, 876 C. 1904 [1] 1004).
- $C_{11}H_{15}ON_3Cl_2$  1) 4-Semicarbazon-1-Dichlormethyl-1,2,5-Trimethyl-1,4-Dihydrobenzol. Sm. 192° (B. 35, 4217 C. 1903 [1] 162).
- $C_{11}H_{15}ON_3S_2$  1) Methylester d.  $\alpha$ -Aethylamidoformyl- $\alpha$ -Phenylhydrazin- $\beta$ -Dithiocarbonsäure. Sm. 122° (B. 36, 1376 C. 1903 [1] 1344).
- $C_{11}H_{15}OCIS$  \*1) i-Methyläthylphenacylsulfinchlorid.  $HgCl_2$  (Soc. 81, 1559 C. 1903 [1] 144).
- 2) i-Methyläthylphenacylsulfinchlorid. 2 +  $PtCl_4$  (Soc. 81, 1558 C. 1903 [1] 144).
- $C_{11}H_{15}OJS$  1) i-Methyläthylphenacylsulfinjodid.  $HgJ_2$  (Soc. 81, 1559 C. 1903 [1] 23, 144).
- $C_{11}H_{15}O_2NS$  \*1) Piperidid d. Benzolsulfonsäure. Sm. 92–93° (B. 36, 2706 C. 1903 [2] 829).
- 2) Sultan d. 1-[ $\alpha$ -Oxyisopropyl]benzol-2-Sulfonsäureäthylamid. Sm. 40° (B. 37, 3257 C. 1904 [2] 1031).
- $C_{11}H_{15}O_2N_3S$  1)  $\alpha$ -Imido- $\alpha$ -[4-Dimethylamidophenyl]amidodimethylsulfid- $\alpha'$ -Carbonsäure (4-Dimethylamidophenylthiohydantoinsäure) (C. 1903 [1] 1258).
- $C_{11}H_{15}O_2ClIS$  3) Chlorid d.  $\beta$ -Phenylpentan- $\beta$ -Sulfonsäure. Sd. 194°<sub>12</sub> (B. 36, 3689 C. 1903 [2] 1426).
- 4) Chlorid d.  $\gamma$ -Phenylpentan- $\beta$ -Sulfonsäure. Fl. (B. 36, 3694 C. 1903 [2] 1427).
- 5) Chlorid d. 4-Isopropyl-1-Aethylbenzol- $\beta$ -Sulfonsäure. Sd. 158°<sub>10</sub> (B. 36, 1641 C. 1903 [2] 27).
- $C_{11}H_{15}O_2BrS$  1)  $\beta$ - oder  $\gamma$ -Brom- $\alpha$ -[2,4-Dimethylphenyl]sulfonpropan. Fl. (J. pr. [2] 68, 311 C. 1903 [2] 1115).
- $C_{11}H_{15}O_3ClS$  1) Chlorid d. 3-Oxy-1-Propylbenzoläthyläther- $\beta$ -Sulfonsäure. Fl. (B. 37, 3990 C. 1904 [2] 1639).
- $C_{11}H_{15}O_3ClHg$  1) Verbindung (aus Methyleugenol). Sm. 112–113° (B. 36, 3581 C. 1903 [2] 1363).
- $C_{11}H_{15}ON_2S$  \*3)  $\alpha$ -[ $\beta$ -Oxybutyl]- $\beta$ -Phenylthioharnstoff. Sm. 100,5° (B. 37, 2480 C. 1904 [2] 419).
- $C_{11}H_{15}O_2NCl$  2) Chlormethylat d. 2-Dimethylamidobenzol-1-Carbonsäure. +  $AuCl_3$  (B. 37, 410 C. 1904 [1] 943).
- $C_{11}H_{15}O_2NJ$  \*1) Methylester d. Dimethylphenyljodammoniumessigsäure. Sm. 98 bis 99° (B. 37, 417 C. 1904 [1] 943).
- 2) Jodmethylat d. 2-Dimethylamidobenzol-1-Carbonsäuremethylester. Sm. 153° (B. 37, 410 C. 1904 [1] 943).
- 3) Jodmethylat d. 3-Dimethylamidobenzol-1-Carbonsäuremethylester. Sm. 220–221° u. Zers. (B. 37, 411 C. 1904 [1] 943).

- $C_{11}H_{16}O_2NJ$  4) Jodmethylat d. 4-Dimethylamidobenzol-1-Carbonsäure. Sm. 170° u. Zers. (B. 37, 412 C. 1904 [1] 943).  
5) Acetat d. Trimethyl-4-Oxyphenylammoniumjodid. Sm. 192 bis 193° (A. 334, 310 C. 1904 [2] 986).
- $C_{11}H_{16}O_3NJ$  1) Jodmethylat d. Methyladamascenin +  $H_2O$ . Sm. 164—166° (Ar. 242, 319 C. 1904 [2] 457).  
2) Jodmethylat d. 3-Dimethylamido-4-Oxybenzol-1-Carbonsäure. Sm. 190° (A. 325, 330 C. 1903 [1] 770).
- $C_{11}H_{16}O_3N_2S$  3) sym-Di[Dimethylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure (Am. 30, 289 C. 1903 [2] 1121).  
4) uns-Di[Aethylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure (Am. 30, 288 C. 1903 [2] 1121).
- $C_{11}H_{16}O_5N_3Cl$  1)  $\gamma$ -Lakton d.  $\zeta$ -Chlor- $\beta$ -Semicarbazon- $\alpha$ -Oxyhexan- $\alpha$ -Dicarbonsäure- $\alpha$ -Aethylester. Sm. 118—119° (C. r. 136, 435 C. 1903 [1] 698).
- $C_{11}H_{17}ON_2Cl$  3) Phenylamid d. Trimethylchlorammoniumessigsäure +  $H_2O$ . Sm. 204—207° (wasserfrei). +  $HgCl_2$ , 2 +  $PtCl_4$ , +  $AuCl_3$  (Ar. 241, 122 C. 1903 [1] 1023).  
4) Verbindung (aus Trimethylphenacylammoniumchloridoxim). 2 +  $PtCl_4$ , +  $AuCl_3$  (Ar. 237, 232). — \*III, 101.
- $C_{11}H_{17}ON_2Br$  2) Phenylamid d. Trimethylbromammoniumessigsäure. Sm. 201 bis 203° (Ar. 241, 122 C. 1903 [1] 1023).
- $C_{11}H_{17}O_2NS$  24) Amid d.  $\beta$ -Phenylpentan- $\beta$ -Sulfonsäure. Sm. 66—67° (B. 36, 3690 C. 1903 [2] 1426).  
25) Amid d.  $\gamma$ -Phenylpentan- $\beta$ -Sulfonsäure. Sm. 89—90° (B. 36, 3694 C. 1903 [2] 1427).
- $C_{11}H_{17}O_3NS$  8) Amid d. 3-Oxy-1-Propylbenzyläthyläther- $\beta$ -Sulfonsäure. Sm. 84° (B. 37, 3990 C. 1904 [2] 1639).  
9) Amid d. 4-Oxy-1-Propylbenzyläthyläther- $\beta$ -Sulfonsäure. Sm. 97—98° (B. 37, 3991 C. 1904 [2] 1640).  
10) Aethylamid d. 1-[ $\alpha$ -Oxyisopropyl]benzol-2-Sulfonsäure +  $\frac{1}{2}H_2O$ . Sm. 109—110° (B. 37, 3255 C. 1904 [2] 1031).
- $C_{11}H_{17}O_5BrS$  1) Methyl ester d. Bromdihydrocampholensulfocarbonsäure. Sm. 192—193° u. Zers. (C. 1903 [2] 38; Soc. 83, 1112 C. 1903 [2] 794).
- $C_{11}H_{18}ON_3Cl$  1) Semicarbazon d.  $\beta$ -Chlorcampher. Sm. 183° (C. 1403 [2] 373).
- $C_{11}H_{18}O_3NBr$  1) 1-1-[ $\alpha$ -Bromisocapronyl]tetrahydropyrrol-2-Carbonsäure. Sm. 154—158° (B. 37, 3074 C. 1904 [2] 1209).  
2) r-1-[ $\alpha$ -Bromisocapronyl]tetrahydropyrrol-2-Carbonsäure. Sm. 159,5—163° (B. 37, 3073 C. 1904 [2] 1209).
- $C_{11}H_{18}O_3N_3S$  1) 2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Aethyltetrahydroimidazol-1- $\alpha$ -Amidoisobuttersäure. Sm. 110° (C. 1904 [2] 1028).
- $C_{11}H_{20}O_3NJ$  2) Jodmethylat d. r-Eegoninmethylester. Sm. 182—182,5° (A. 326, 69 C. 1903 [1] 841).
- $C_{11}H_{21}ONS$  \*1) Amid d. Menthylxanthogensäure (C. 1904 [1] 1347).
- $C_{11}H_{22}ONJ$  \*2) Jodmethylat d. Lupinin (Ar. 235, 279). — \*III, 663.
- $C_{11}H_{22}ON_2Cl_2$  1) Di[Chlormethylat] d. 2-Di[Dimethylamido]methylfuran. 2 + 2  $AuCl_3$  (A. 335, 378 C. 1904 [2] 1406).
- $C_{11}H_{22}ON_2J_2$  1) Di[Jodmethylat] d. 2-Di[Dimethylamido]methylfuran (A. 335, 377 C. 1904 [2] 1406).
- $C_{11}H_{23}ON_2J$  1) Jodmethylat d. 1,2,2,5,5-Pentamethyltetrahydropyrrol-3-Carbonsäureamid. Zers. bei 255° (B. 36, 3362 C. 1903 [2] 1186).
- $C_{11}H_{25}O_2N_2P$  1) Diäthylmonamid d. 1-Piperidylphosphinsäuremonoäthylester. Fl. (A. 326, 195 C. 1903 [1] 820).

- $C_{11}H_8ONClBr_2$  1) 4-Chlor-2,6-Dibromphenylhydroxyd d. Pyridin. Salze siehe (A. 333, 339 C. 1904 [2] 1151).
- $C_{11}H_{10}O_2N_3BrJ$  1) Jodäthylat d. 3-Brom-5-Nitrochinolin. Sm. 195° (213°) (J. pr. [2] 39, 306).
- $C_{11}H_{11}ONBrJ$  1) Jodmethylat d. 5-Brom-6-Oxychinolinmethyläther. Sm. 220° u. Zers. (B. 36, 460 C. 1903 [1] 590).
- $C_{11}H_{11}O_2N_2BrS$  1) 4-Brom-5-Methylsulfon-3-Methyl-1-Phenylpyrazol. Sm. 150 bis 151° (A. 331, 231 C. 1904 [1] 1220).

- $C_{11}H_{12}O_3NBrS$  \*1) 4-Bromphenylmerkaptursäure. Sm. 152—153° (*C.* 1903 [2] 1431).  
 $C_{11}H_{17}O_3NBrP$  1) 2-Brom-4-Methylphenylmonamid d. Phosphosäurediäthylester. Sm. 102° (*A.* 326, 239 *C.* 1903 [1] 868).  
 $C_{11}H_{28}ON_2JS$  1) Aethyläther d. Methylidi[Diäthylamido]oxyphosphoniumjodid. Fl. (*A.* 326, 162 *C.* 1903 [1] 761).

**C<sub>12</sub>-Gruppe.**

- $C_{12}H_8$  \*1) Acenaphtylen. Sm. 92—93° (*C.* 1903 [2] 44).  
 $C_{12}H_{10}$  \*1) Acenaphen. Sm. 95° (*C.* 1903 [2] 44).  
 \*2) Biphenyl. Sm. 70,5° (*A.* 332, 40 *C.* 1904 [2] 39; *B.* 37, 2531 *C.* 1904 [2] 447).  
 $C_{12}H_{14}$  7)  $\delta$ -Phenyl- $\beta$ -Methyl- $\beta$ - $\gamma$ -Pentadien. Sd. 218—220°<sub>751</sub> u. Zers. (*B.* 37, 2305 *C.* 1904 [2] 215).  
 8) Kohlenwasserstoff (aus 1-Oxy-1-Phenylhexahydrobenzol). Sd. 133°<sub>20</sub> (*C. r.* 138, 1323 *C.* 1904 [2] 219).  
 $C_{12}H_{16}$  \*2)  $\alpha$ -[4-Isopropylphenyl]propen. Sd. 225—235° (*B.* 36, 2237 *C.* 1903 [2] 438).  
 \*5) 1,2,3,4,5,6-Hexahydrobiphenyl. Sm. 0°; Sd. 238°<sub>770</sub> (*C.* 1903 [2] 989).  
 \*6)  $\alpha$ -[2,4-Dimethylphenyl] $\alpha$ -Buten. Sd. 226—228° (*B.* 36, 2237 *C.* 1903 [2] 438).  
 \*7)  $\alpha$ -[2,4,6-Trimethylphenyl]propen. Sd. 223—224°<sub>745</sub> (*B.* 37, 927 *C.* 1904 [1] 1209).  
 10)  $\alpha$ -Phenyl- $\beta$ -Hexen. Sd. 108°<sub>18</sub> (*B.* 37, 2313 *C.* 1904 [2] 216).  
 11)  $\beta$ -Phenyl- $\gamma$ -Hexen. Sd. 84°<sub>10</sub> (*B.* 36, 1405 *C.* 1903 [1] 1347).  
 12)  $d$ - $\alpha$ -Phenyl- $\gamma$ -Methyl- $\alpha$ -Penten. Sd. 100—103°<sub>9</sub> (*B.* 37, 653 *C.* 1904 [1] 937).  
 13)  $\gamma$ -Phenyl- $\beta$ -Methyl- $\beta$ -Penten. Sd. 206—207°<sub>765</sub> (*B.* 37, 1725 *C.* 1904 [1] 1515).  
 14)  $\delta$ -Phenyl- $\beta$ -Methyl- $\beta$ -Penten. Sd. 210—211°<sub>755</sub> (*B.* 37, 2306 *C.* 1904 [2] 215).  
 15)  $\alpha$ -Phenyl- $\gamma$ -Methyl- $\beta$ -Penten. Sd. 120°<sub>20</sub> (226°<sub>749</sub>) (*B.* 37, 2313 *C.* 1904 [2] 216; *B.* 37, 2317 *C.* 1904 [2] 217).  
 16)  $\beta$ -Phenyl- $\delta$ -Methyl- $\beta$ -Penten. Sd. 207°<sub>784</sub> (*B.* 37, 2308 *C.* 1904 [2] 216).  
 17)  $\alpha$ -Phenyl- $\beta$ -Aethyl- $\alpha$ -Buten. Sd. 204—206° u. ger. Zers. (*B.* 37, 1724 *C.* 1904 [1] 1515).  
 18)  $\alpha$ -[4-Methylphenyl]- $\gamma$ -Methyl- $\alpha$ -Buten. Sd. 221—222° (*B.* 37, 1089 *C.* 1904 [1] 1260).  
 19) 2,5-Diäthylphenyläthen. Sd. 96—97°<sub>12</sub> (*B.* 36, 1634 *C.* 1903 [2] 25).  
 $C_{12}H_{18}$  \*13) 2-Propyl-1,3,5-Trimethylbenzol. Sd. 221° (*B.* 37, 1719 *C.* 1904 [1] 1489).  
 \*14) 1,3,5-Triäthylbenzol. Sd. 215°<sub>755</sub>. +  $Al_2Cl_6$  (*B.* 36, 1634 *C.* 1903 [2] 26; *J. pr.* [2] 68, 212 *C.* 1903 [2] 1114).  
 \*23) 1,2,4-Triäthylbenzol. Sd. 217—218°<sub>765</sub> (*B.* 36, 1634 *C.* 1903 [2] 25).  
 24)  $\delta$ -Phenyl- $\beta$ -Methylpentan. Sd. 197° (*B.* 37, 2308 *C.* 1904 [2] 216).  
 25)  $d$ - $\alpha$ -Phenyl- $\gamma$ -Methylpentan. Sd. 220°<sub>757</sub> (*B.* 37, 654 *C.* 1904 [1] 938).  
 $C_{12}H_{20}$  9) 4-Isobutyliden-1,1,5-Trimethyl-2,3-Dihydro-R-Penten (Dimethylcampholanden). Sd. 188—190° (*B.* [3] 31, 462 *C.* 1904 [1] 1516).  
 10) Kohlenwasserstoff (aus 1-Oxydodekahydrobiphenyl). Sd. 124°<sub>20</sub> (*C. r.* 138, 1323 *C.* 1904 [2] 219).  
 $C_{12}H_{22}$  8) Kohlenwasserstoff (aus Petroleum). Sd. 205—210°<sub>780</sub> (*C.* 1904 [1] 61).

## — 12 II —

- $C_{12}H_4Cl_8$  1) 2,4,6,2',4',6'-Hexachlorbiphenyl. Sm. 112,5° (*A.* 332, 56 *C.* 1904 [2] 41).  
 $C_{12}H_6O_2$  \*1) 7,8-Acenaphtenchinon (*G.* 33 [1] 36 *C.* 1903 [1] 881).  
 $C_{12}H_6O_3$  \*2) Anhydrid d. Naphtalin-1,8-Dicarbonsäure Sm. 266° (*B.* 36, 967 *C.* 1903 [1] 1087; *G.* 33 [2] 129 *C.* 1903 [2] 1181).  
 $C_{12}H_6O_4$  3) Anhydrid d. 4-Oxynaphtalin-1,8-Dicarbonsäure. Sm. 257° (*A.* 327, 87 *C.* 1903 [1] 1228).

- $C_{12}H_6O_{12}$  \*1) Benzolhexacarbonsäure (*Bl.* [3] 31, 135 *C.* 1904 [2] 724).  
 \*2) Thiophansäure. Sm. 242—245° (*A.* 327, 343 *C.* 1903 [2] 509).  
 $C_{12}H_6N_2$  8) Diazoacenaphtylen. Sm. 164° (*G.* 33 [1] 48 *C.* 1903 [1] 882).  
 $C_{12}H_6Cl_4$  1) 2,4,2',4'-Tetrachlorbiphenyl. Sm. 83° (*A.* 332, 55 *C.* 1904 [2] 40).  
 2) 3,4,3',4'-Tetrachlorbiphenyl. Sm. 172°; Sd. 230°<sub>60</sub> (*Soc.* 85, 7 *C.* 1904 [1] 376, 728).  
 $C_{12}H_7J_5$  1) 3,3',2-Trijoddiphenyljodoniumjodid (*B.* 37, 1309 *C.* 1904 [1] 1340).  
 $C_{12}H_8O_2$  \*3) 2-Phenyl-1,4-Benzochinon. Sm. 114° (*B.* 37, 879 *C.* 1904 [1] 1142).  
 $C_{12}H_8O_4$  18) 1,8-Lakton d. 4- oder -5-Oxy-1-Dioxy-methylnaphtalin-8-Carbonsäure. Sm. 100° (*A.* 327, 89 *C.* 1903 [1] 1228).  
 $C_{12}H_8O_7$  \*1) Purpurogallincarbonsäure. Sm. noch nicht bei 330° (*Soc.* 83, 199 *C.* 1903 [1] 640; *Soc.* 85, 247 *C.* 1904 [1] 798, 1005).  
 $C_{12}H_8N_2$  \*6) Phenazon. Sm. 156°. (2HCl, ZnCl<sub>2</sub>) (*B.* 37, 25 *C.* 1904 [1] 523).  
 $C_{12}H_8Cl_2$  \*1) 4,4'-Dichlorbiphenyl. Sm. 148°; Sd. 315° (*A.* 332, 54 *C.* 1904 [2] 40).  
 2) 3,3'-Dichlorbiphenyl. Sm. 29° (23°); Sd. 298° (322—324°) (*Soc.* 85, 7 *C.* 1904 [1] 376, 728; *A.* 332, 54 *C.* 1904 [2] 40).  
 $C_{12}H_8Br_2$  4) 3,3'-Dibrombiphenyl. Sm. 53° (*A.* 332, 57 *C.* 1904 [2] 41).  
 $C_{12}H_8J_4$  1) Di[3-Jodphenyl]jodoniumjodid. Sm. 141° (*B.* 37, 1308 *C.* 1904 [1] 1340).  
 $C_{12}H_9N$  \*1) Carbazol. Sm. 238° (*A.* 332, 84 *C.* 1904 [1] 1571).  
 7) 7,8-Imidoacenaphten. Sm. 97°. HCl, (2HCl, PtCl<sub>4</sub>), Acetat (*G.* 33 [1] 49 *C.* 1903 [1] 882).  
 $C_{12}H_9N_3$  \*4) 2-Phenyl-2,1,3-Benzotriazol. Sm. 109,5° (*B.* 36, 3825 *C.* 1904 [1] 18).  
 $C_{12}H_9Br$  \*1) 3-Bromacenaphten. Sm. 52°; Sd. 335°. Pikrat (*A.* 327, 85 *C.* 1903 [1] 1228).  
 $C_{12}H_9J$  1) 4-Jodbiphenyl. Sm. 111° (*A.* 332, 52 *C.* 1904 [2] 40).  
 $C_{12}H_9J_3$  2) 3-Joddiphenyljodoniumjodid. Zers. bei 89° (*B.* 37, 1307 *C.* 1904 [1] 1340).  
 $C_{12}H_{10}O$  \*1) 2-Oxybiphenyl. Sm. 67,7° (*Am.* 29, 125 *C.* 1903 [1] 705).  
 \*2) 4-Oxybiphenyl (*Am.* 29, 124 *C.* 1903 [1] 705).  
 \*3) Diphenyläther. Sm. 26,9—27°; Sd. 258,97° (*C.* 1904 [1] 1204).  
 7) 3-Oxybiphenyl. Sm. 78° (*B.* 36, 4085 *C.* 1904 [1] 268).  
 $C_{12}H_{10}O_2$  24) 3,4-Dioxybiphenyl? Sm. 136—136,5°; Sd. oberh. 360° (*Am.* 29, 128 *C.* 1903 [1] 705).  
 25) isom. 2-Dioxybiphenyl. Sm. 147,5—148,5° (*Am.* 29, 129 *C.* 1903 [1] 705).  
 26) 2-Oxydiphenyläther. Sm. 105—106° (*Am.* 29, 127 *C.* 1903 [1] 705).  
 27) Methyl-4-Oxy-1-Naphtylketon. Sm. 98° (*B.* 25, 3534). — \*III, 141.  
 28) Benznorcaradiëncarbonsäure. Sm. 165—166°. Ag (*B.* 36, 3506 *C.* 1903 [2] 1273).  
 29) Lakton d.  $\delta$ -Oxy- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadiën- $\beta$ -Carbonsäure. Sm. 60 bis 63° (*A.* 319, 187 *C.* 1902 [1] 106). — \*II, 986.  
 $C_{12}H_{10}O_3$  \*3) 3,3'-Dioxydiphenyläther (*B.* 36, 3051 *C.* 1903 [2] 1008).  
 \*27) Anhydrid d.  $\beta$ -Phenyl- $\beta$ -Buten- $\gamma\delta$ -Dicarbonsäure. Sm. 112—114° (*B.* 37, 1622 *C.* 1904 [1] 1419).  
 32) 2-Oxynaphtalinmethyläther-1-Carbonsäure. Sm. 176° u. Zers. (*Bl.* [3] 17, 311; *C. r.* 136, 617 *C.* 1903 [1] 881; *Bl.* [3] 31, 32 *C.* 1904 [1] 519). — \*II, 989.  
 33)  $s$ -Keto- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadiën- $s$ -Carbonsäure + H<sub>2</sub>O (Cinnamylidenbrenztraubensäure). Sm. 75° (107° wasserfrei) (*B.* 37, 1319 *C.* 1904 [1] 1344).  
 34) 1-Keto-3-Methylinden-2-Methylcarbonsäure. Sm. 154—155° (*B.* 37, 1620 *C.* 1904 [1] 1419).  
 35) Lakton d. 3-Keto-1-Oxy-1-Methyl-2,3-Dihydroinden-2-Methylcarbonsäure. Sm. 179,5° (*B.* 37, 1621 *C.* 1904 [1] 1419).  
 36) Benzylester d. Isobrenzschleimsäure. Sm. 71° (*C. r.* 137, 992 *C.* 1904 [1] 291).  
 $C_{12}H_{10}O_4$  \*22) Anhydrid d.  $\alpha$ -Keto- $\alpha$ -Phenylbutan- $\gamma\delta$ -Dicarbonsäure. Sm. 146° (*C.* 1903 [2] 944).  
 38) Acetat d. 6-Oxymethyl-1,2-Benzpyron. Sm. 108—109°; Sd. 205 bis 207°<sub>10</sub> (*B.* 37, 193 *C.* 1904 [1] 660).  
 $C_{12}H_{10}O_5$  28) Anhydrid d. Triacetsäurelakton. Sd. 170—172°<sub>18</sub> (*B.* 37, 3390 *C.* 1904 [2] 1220).

- $C_{12}H_{10}O_5$  29) Aldehyd d. 4,5-Dioxy-3-Acetoxy-1-Aethenylbenzol-4,5-Methylen-äther-2-Carbonsäure. Sm. 84–85° (B. 36, 1533 C. 1903 [2] 52).  
 30) Aethylester d. 4-Oxy-1,2-Benzpyron-3-Carbonsäure. Sm. 101° (B. 36, 464 C. 1903 [1] 636).  
 31) Verbindung (aus 1,2,3-Triox-9,10-Anthrachinon). Sm. 197°.  $Ag_2$  (M. 22, 588). — \*III, 310.
- $C_{12}H_{10}O_6$  18) trans-1-Phenyl-R-Trimethylen-1<sup>2</sup>,2,3-Tricarbonsäure. Sm. 273 bis 275° u. Zers.  $Ag_3$  (B. 36, 3507 C. 1903 [2] 1274).  
 19) 7,8-Dioxy-1,4-Benzpyrondimethyläther-2-Carbonsäure. Sm. 272° (B. 36, 127 C. 1903 [1] 468).  
 20)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenylpropan- $\beta\gamma\gamma$ -Tricarbonsäure + 4H<sub>2</sub>O (Phenylparakoncarbonsäure). Sm. 188°. K (B. 25, 1153; B. 36, 3776 Anm. C. 1904 [1] 41). — II, 2018.  
 21) Diacetat d. 5,6-Dioxy-2-Keto-1,2-Dihydrobenzofuran. Sm. 106° (B. 37, 820 C. 1904 [1] 1151).
- $C_{12}H_{10}O_7$   
 $C_{12}H_{10}N_2$  4) Areolatin. Sm. 270° (J. pr. [2] 68, 59 C. 1903 [2] 513).  
 \*1) Azobenzol. (2HCl, PtCl<sub>4</sub>) (D.R.P. 141535 C. 1903 [1] 1283; B. 36, 4109 C. 1904 [1] 272; C. 1904 [2] 1383).  
 \*4) 3-Amidocarbazol. Sm. 254°. Pikrat (A. 332, 99 C. 1904 [1] 1570).  
 \*6) 2-Methyl- $\beta$ -Naphthimidazol. Chromat (Soc. 83, 1196 C. 1903 [2] 1444).  
 13) 4-[ $\beta$ -Phenyläthenyl]-1,3-Diazin. Sm. 72–74°; Sd. 325–327°<sub>788</sub> (B. 36, 3384 C. 1903 [2] 1193).  
 14) 2-Methyl- $\alpha$ -oder- $\beta$ -Naphthimidazol + H<sub>2</sub>O. Sm. 264° u. Zers. HCl + H<sub>2</sub>O, H<sub>2</sub>CrO<sub>4</sub> + 2H<sub>2</sub>O, Pikrat (Soc. 83, 1190 C. 1903 [2] 1444).  
 15) Nitril d. 1-Naphthylamidoessigsäure. Sm. 45–46° (B. 37, 4082 C. 1904 [2] 1723).  
 16) Nitril d. 2-Naphthylamidoessigsäure. Sm. 82–85° (B. 37, 4082 C. 1904 [2] 1723).  
 17) Verbindung (aus Tryptophan) (C. 1903 [2] 1012).
- $C_{12}H_{10}N_4$  \*6) 2,3-Diamido-5,10-Naphthdiazin (B. 35, 4302 C. 1903 [1] 344).  
 \*8) 3,8-Diamido-5,6-Naphtisodiazin (Diamidodiphenazon). Sm. 265° (C. 1904 [1] 1614; B. 37, 28 C. 1904 [1] 523).
- $C_{12}H_{10}S_2$   
 $C_{12}H_{10}S_3$  \*1) Diphenyldisulfid (Bl. [3] 29, 762 C. 1903 [2] 620).  
 2) Di[4-Merkaptophenyl]sulfid. Sm. 116,5°; Sd. 147,5–148,5°<sub>11</sub>. Na<sub>2</sub>, Pb (R. 22, 361 C. 1904 [1] 23).
- $C_{12}H_{10}Hg$   
 $C_{12}H_{10}Se_2$   
 $C_{12}H_{11}N$  \*1) Quecksilberdiphenyl. Sm. 120° (B. 37, 1127 C. 1904 [1] 1258).  
 \*1) Diphenyldiselenid. Sm. 62° (Bl. [3] 29, 763 C. 1903 [2] 620).  
 \*3) 4-Amidobiphenyl (B. 37, 881 C. 1904 [1] 1143).  
 \*4) 3-Amidoacenaphten. Sm. 108° (A. 327, 81, 94 C. 1903 [1] 1227).  
 10) 3-Amidobiphenyl. Sm. 30°; Sd. 254°. H<sub>2</sub>SO<sub>4</sub> (B. 36, 4084 C. 1904 [1] 268; B. 37, 882 C. 1904 [1] 1143).  
 11) 3-Benzylpyridin. Sm. 34; Sd. 286–287°<sub>740</sub>. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 36, 2709, 2711 C. 1903 [2] 837).  
 12) 2-Methyl-4-Phenylpyridin. Sd. 280°. Pikrat (B. 36, 2458 C. 1903 [2] 671).
- $C_{12}H_{11}N_3$  \*1) Diazoamidobenzol (B. 36, 910 C. 1903 [1] 974; C. r. 137, 1264 C. 1904 [1] 439).  
 \*6) 4-Amidoazobenzol. HCl (B. 36, 3965 C. 1904 [1] 162).  
 \*8) 5-Amido-2-Methyl- $\alpha$ -oder- $\beta$ -Naphthimidazol + 3 $\frac{1}{2}$  (9 $\frac{1}{2}$ ) H<sub>2</sub>O. Zers. bei 265°. Acetat + H<sub>2</sub>O (Soc. 83, 1185 C. 1903 [2] 1443).  
 \*12) isom. 5-Amido-2-Methyl- $\alpha$ -oder- $\beta$ -Naphthimidazol. (2HCl, HgCl<sub>2</sub> + 5H<sub>2</sub>O), Oxalat (Soc. 83, 1198 C. 1903 [2] 1445).
- $C_{12}H_{12}O$  \*2) 2-Oxy-1,4-Dimethylnaphtalin (C. 1903 [2] 1377).  
 \*9)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Hexin. Sd. 148–150°<sub>18</sub> (C. r. 137, 796 C. 1904 [1] 43).
- $C_{12}H_{12}O_2$  \*1) Dimethyläther d. 2,7-Dioxynaphtalin. Sm. 135°; Sd. 319°<sub>751</sub> (A. 327, 117 C. 1903 [1] 1214).  
 \*16) Dimethyläther d. 2,3-Dioxynaphtalin. Sm. 116,5° (B. 36, 569 C. 1903 [1] 702).  
 18) Dimethyläther d. 1,5-Dioxynaphtalin. Sm. 174–175° (B. 36, 569 C. 1903 [1] 702).  
 19) Dimethyläther d. 2,6-Dioxynaphtalin. Sm. 149,5° (B. 36, 570 C. 1903 [1] 702).

- $C_{12}H_{12}O_2$  20) 7-Oxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran.  $HCl + H_2O$ , (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ) Pikrat (*B.* 36, 191 *C.* 1903 [1] 469; *B.* 37, 1792 *C.* 1904 [1] 1611).
- 21)  $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadien- $\epsilon$ -Carbonsäure. Sm. 111–112°.  $Ca + 2H_2O$ ,  $Ba + 2H_2O$ ,  $Ag$  (*A.* 331, 162 *C.* 1904 [1] 1211).
- 22) 1- $[\beta$ -Phenyläthenyl]-R-Trimethylen-2-Carbonsäure. Sm. 130° (*B.* 37, 2104 *C.* 1904 [2] 104).
- 23) Methylester d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 71° (*A.* 336, 198 *C.* 1904 [2] 1731).
- $C_{12}H_{12}O_3$  \*25)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Penten- $\epsilon$ -Carbonsäure. Sm. 120° (123°) (*B.* 23, 74; *A.* 258, 129; *B.* 37, 1320 *C.* 1904 [1] 1345). — \*II, 986.
- 28) 5,7-Dioxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran +  $H_2O$ .  $HCl + H_2O$ , Pikrat (*B.* 37, 1799 *C.* 1904 [1] 1612).
- 29) 6,7-Dioxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran.  $HCl + 2\frac{1}{2}H_2O$ , Pikrat (*B.* 37, 1796 *C.* 1904 [1] 1612).
- 30) 7,8-Dioxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran.  $HCl + H_2O$ , Pikrat (*B.* 37, 1797 *C.* 1904 [1] 1612).
- 31)  $\epsilon$ -Oxy- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadien- $\epsilon$ -Carbonsäure. Sm. 145° (*B.* 37, 1320 *C.* 1904 [1] 1344).
- 32) Acetat d.  $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten. Sm. 80–81° (*B.* 36, 134 *C.* 1903 [1] 458).
- $C_{12}H_{12}O_4$  \*5) cis-trans- $\beta$ -Phenyl- $\beta$ -Buten- $\gamma\delta$ -Dicarbonsäure. Sm. 171° (*B.* 37, 1619 *C.* 1904 [1] 1419).
- \*35)  $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha\alpha$ -Dicarbonsäure. Sm. 124° (*B.* 37, 3123 *C.* 1904 [2] 1217).
- \*36)  $\alpha$ -Phenyl- $\beta$ -Buten- $\delta\delta$ -Dicarbonsäure. Sm. 112°.  $Ag_2$  (*B.* 37, 3121 *C.* 1904 [2] 1217).
- \*37) cis- $\beta$ -Phenyl- $\beta$ -Buten- $\gamma\delta$ -Dicarbonsäure. Sm. 183° (*B.* 37, 1619 *C.* 1904 [1] 1419).
- 46) Dimethyläther d. 7,8-Dioxy-2-Methyl-1,4-Benzpyron +  $H_2O$ . Sm. 102° (wasserfrei) (*B.* 36, 2192 *C.* 1903 [2] 384).
- 47) Podophylloresin (*Soc.* 73, 221). — \*III, 474.
- 48) Dioxynorcarencarbonsäure. Sm. 203° u. *vers.* (*B.* 36, 3507 *C.* 1903 [2] 1274).
- 49) 4-Oxymethylbenzofuranäthyläther-1-Carbonsäure. Sm. 163–164°.  $Ca$  (*B.* 37, 198 *C.* 1904 [1] 661).
- $C_{12}H_{12}O_5$  \*11)  $\alpha$ -Keto- $\alpha$ -Phenylbutan- $\gamma\delta$ -Dicarbonsäure. Sm. 160° (*C.* 1903 [2] 944).
- $C_{12}H_{12}O_6$  \*22)  $\alpha$ -Phenylpropan- $\alpha\beta\gamma$ -Tricarbonsäure +  $H_2O$ . Sm. 110° (*M.* 24, 371 *C.* 1903 [2] 496).
- $C_{12}H_{12}N_2$  \*4) 2,4'-Diamidobiphenyl. Sm. 57–58° (*B.* 36, 4090 *C.* 1904 [1] 269).
- \*6) 4,4'-Diamidobiphenyl (*D.R.P.* 147852 *C.* 1904 [1] 133).
- \*10) s-Diphenylhydrazin (*B.* 36, 339 *C.* 1903 [1] 633).
- $C_{12}H_{12}N_4$  \*2) 3,3'-Diamidoazobenzol. Sm. 156° (*J. pr.* [2] 87, 265 *C.* 1903 [1] 1221).
- $C_{12}H_{12}N$  \*2) 1-Aethylamidonaphtalin. Sd. 292–323°<sub>745</sub> (*C.* 1903 [1] 998).
- \*3) 2-Aethylamidonaphtalin. Sd. 322–336°<sub>745</sub> (*C.* 1903 [1] 998).
- $C_{12}H_{13}N_3$  \*3) 4,4'-Diamidodiphenylamin. Sm. 158° (*D.R.P.* 139568 *C.* 1903 [1] 746).
- $C_{12}H_{12}N_5$  2)  $\alpha$ -Tetraamidocarbazol. 4HCl (*B.* 37, 3598 *C.* 1904 [2] 1505).
- 3)  $\beta$ -Tetraamidocarbazol. 4HCl (*B.* 37, 3598 *C.* 1904 [2] 1505).
- 4)  $\gamma$ -Tetraamidocarbazol. 4HCl (*B.* 37, 3598 *C.* 1904 [2] 1505).
- 5)  $\delta$ -Tetraamidocarbazol. 4HCl (*B.* 37, 3598 *C.* 1904 [2] 1505).
- $C_{12}H_{14}O$  \*10)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\delta$ -Methyl- $\alpha$ -Penten. Sd. 284–286°<sub>760</sub> (*Soc.* 81, 1489 *C.* 1903 [1] 138).
- $C_{12}H_{14}O_2$  \*4)  $\alpha\gamma$ -Diketo- $\alpha$ -Phenylhexan. Sd. 152–155°<sub>10</sub> (*C. r.* 139, 209 *C.* 1904 [2] 649).
- \*14) Diäthylphthalid. Sm. 54° (*B.* 37, 736 *C.* 1904 [1] 1078).
- 28) Äthyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Buten. Sd. 167–169°<sub>20</sub> (*Soc.* 85, 1180 *C.* 1904 [2] 1216).
- 29)  $\beta\delta$ -Diketo- $\gamma$ -Benzylpentan. Sd. 151–152°<sub>16</sub> (*A.* 330, 235 *C.* 1904 [1] 945).
- 30) Trimethyl-m-Biscyklohexanon. Sm. 136°; Sd. 320°<sub>754</sub> (*B.* 36, 2150 *C.* 1903 [2] 369).
- 31) isom. Trimethyl-m-Biscyklohexanon. Sm. 64°; Sd. 280°<sub>754</sub> (*B.* 36, 2150 *C.* 1903 [2] 369).

- $C_{12}H_{14}O_2$  32)  $\alpha$ -Phenyl- $\beta$ -Penten- $\epsilon$ -Carbonsäure. Sm. 88°. Ba + 2H<sub>2</sub>O, Ag (A. 331, 163 C. 1904 [1] 1211).  
 33) Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenylpentan- $\gamma$ -Carbonsäure. Sm. 30° (C. 1904 [1] 1259).  
 34) Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenylbutan- $\beta$ -Methylcarbonsäure. Sm. 88°; Sd. 165° (C. 1904 [1] 1258).  
 35) Aethylester d.  $\alpha$ -Phenylpropen- $\alpha$ -Carbonsäure. Sd. 128—131°<sub>15</sub> (B. 36, 2253 C. 1903 [2] 436).  
 36) Aethylester d.  $\beta$ -Phenylpropen- $\alpha$ -Carbonsäure. Sd. 133—135° (269 bis 271°) (B. 37, 1092 C. 1904 [1] 1262; C. r. 138, 987 C. 1904 [1] 1439).  
 37) Aethylester d. trans-1-Phenyl-R-Trimethylen-2-Carbonsäure. Sm. 39°; Sd. 144—148°<sub>15</sub> (B. 36, 3783 C. 1904 [1] 42).
- $C_{12}H_{14}O_3$  \*12)  $\alpha$ -Keto- $\alpha$ -Phenylpentan- $\gamma$ -Carbonsäure. Sm. 87° (C. 1904 [1] 1259).  
 \*40) Aethylester d.  $\beta$ -Benzoylpropionsäure. Sd. 184°<sub>22</sub> (C. 1904 [1] 1259).  
 56) Anhydrobis-1, 4-Diketohexahydrobenzol. Sm. 133° (B. 37, 3488 C. 1904 [2] 1301).  
 57)  $\alpha$ -[2-Aethoxylphenyl]propen- $\gamma$ -Carbonsäure ( $\gamma$ -[2-Aethoxylphenyl]-isocrotonsäure). Sm. 130—131°. Ag (B. 37, 3988 C. 1904 [2] 1639).  
 58)  $\alpha$ -[3-Aethoxylphenyl]propen- $\gamma$ -Carbonsäure. Sm. 98° (B. 37, 3989 C. 1904 [2] 1639).  
 59)  $\beta$ -Benzoylbutan- $\alpha$ -Carbonsäure. Sm. 78,5° (C. 1904 [1] 1258).  
 60) Aethylester d. 1-Aethylbenzol-4-Ketocarbonsäure. Sd. 186—188°<sub>30</sub> (C. r. 136, 558 C. 1903 [1] 832).
- $C_{12}H_{14}O_4$  \*1) 3, 4-Methylenäther-2, 5-Dimethyläther d. 2, 3, 4, 5-Tetraoxy-1-Allylbenzol (Apiol) (B. 36, 1714 C. 1903 [2] 113; B. 36, 3455 C. 1903 [2] 1177; Ar. 242, 336, 344 C. 1904 [2] 525).  
 \*2) Dillapiol (4, 5-Methylenäther-2, 3-Dimethyläther d. 2, 3, 4, 5-Tetraoxy-1-Allylbenzol (Ar. 242, 339 C. 1904 [2] 524; Ar. 242, 346 C. 1904 [2] 525).  
 \*3) Isoapiol. Pikrat (C. 1904 [2] 954).  
 \*4) Dillisoapiol (4, 5-Methylenäther-2, 3-Dimethyläther d. 2, 3, 4, 5-Tetraoxy-1-Propenylbenzol). Pikrat (Ar. 242, 340 C. 1904 [2] 525; C. 1904 [2] 954).  
 56)  $\alpha$ -[2, 5-Dioxyphenyl]propen-2, 5-Dimethyläther- $\beta$ -Carbonsäure. Sm. 113° (B. 36, 859 C. 1903 [1] 1084).  
 57) Dimethylester d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 57° (M. 24, 423 C. 1903 [2] 622).  
 58) 5-Aethylester d. 1, 3-Dimethylbenzol-2, 5-Dicarbonsäure. Sm. 189 bis 190° (Am. 20, 811). — \*II, 1070.  
 59)  $\alpha$ -Acetat d. 3, 4-Dioxy-1-[ $\alpha$ -Oxypropyl]benzol-3, 4-Methylenäther. Sd. 182—185°<sub>12</sub> (C. 1904 [2] 1568).
- $C_{12}H_{14}O_5$  \*12) 1, 2-Lakton d. 3, 4-Dioxy-1-Dioxyethylbenzol-3, 4-Dimethyläther-1-Aethyläther-2-Carbonsäure. Sm. 92° (B. 36, 1581 C. 1903 [1] 1398).  
 \*21) Diäthylester d. 4-Oxybenzol-1, 3-Dicarbonsäure. Sm. 57° (B. 37, 2122 C. 1904 [2] 438).  
 38)  $\beta$ -[2, 4, 6-Trioxylphenyl]akryltrimethyläthersäure. Sm. 218° u. Zers. (M. 24, 868 C. 1904 [1] 368).  
 39) Aethylester d. 2, 4-Dioxybenzoldimethyläther-1-Ketocarbonsäure (Bl. [3] 17, 946). — \*II, 1122.  
 40) 2-Methoxyphenylester d.  $\alpha$ -Acetoxypropionsäure. Sm. 71°; Sd. 180°<sub>18</sub> (B. 37, 3973 C. 1904 [2] 1605).
- $C_{12}H_{14}O_6$  32)  $\alpha$ -[3, 4-Dioxyphenyl]äthan-3, 4-Dimethyläther- $\beta\beta$ -Dicarbonsäure. Sm. 80° (C. 1904 [2] 903).  
 33) Methylester d. 2-Acetoxy-1-3, 4-Dioxybenzol-3, 4-Dimethyläther-1-Carbonsäure. Sm. 62—64° (M. 25, 512 C. 1904 [2] 1118).
- $C_{12}H_{14}O_7$  9) Pyrogalloldiglykolmonoäthyläthersäure. Sm. 108—109° (D. R. P. 155568 C. 1904 [2] 1443).  
 10) Monoäthylester d. Glutakonylglutakonsäure. Sm. 218—220° u. Zers. (C. r. 136, 694 C. 1903 [1] 960).  
 11) Monoäthylester d. 6-Oxy-1, 4-Dihydrobenzol-1, 3-Dicarbonsäure-4-Methylcarbonsäure. Sm. 154° u. Zers. (B. 37, 2119 C. 1904 [2] 438).  
 12) Diäthylester d. 2, 4, 6-Trioxylbenzol-1, 3-Dicarbonsäure. Sm. 107° (Soc. 85, 166 C. 1904 [1] 163, 722).
- $C_{12}H_{14}O_8$  2) Diäthylester d.  $\alpha\gamma\delta\zeta$ -Tetraketohexan- $\alpha\zeta$ -Dicarbonsäure. Sm. 126° (B. 36, 958 C. 1903 [1] 1019).

- $C_{12}H_{14}N_2$  \*22) 3,4,5-Trimethyl-1-Phenylpyrazol. *Sd.* 287—290°<sub>750</sub>. HCl, (2HCl, PtCl<sub>2</sub>), (HCl, AuCl<sub>3</sub>), Pikrat, Pikrolonat (*B.* 36, 1277 *C.* 1903 [1] 1253; *B.* 36, 3989 *C.* 1904 [1] 172; *B.* 37, 3525 *C.* 1904 [2] 1314).
- 23) 3-Aethyl-5-Phenylpyrazol. *Sm.* 82°; *Sd.* 205—207°<sub>17</sub> (*C. r.* 139, 296 *C.* 1904 [2] 710).
- $C_{12}H_{14}N_4$  \*1) 2,4,2',4'-Tetraamidobiphenyl (*J. pr.* [2] 66, 561 *C.* 1903 [1] 518).
- 14) 3[5]-[ $\alpha$ -Phenylhydrazonäthyl]-4-Methylpyrazol. *Sm.* 135—136° (*B.* 36, 1132 *C.* 1903 [1] 1139).
- $C_{12}H_{14}Br_4$  1)  $\beta\gamma\delta$ -Tetrabrom- $\delta$ -Phenyl- $\beta$ -Methylpentan. *Fl.* (*B.* 37, 2306 *C.* 1904 [2] 215).
- $C_{12}H_{15}N$  \*20) 3,3-Dimethyl-2-Aethylpseudindol. *Sm.* 52—53° (*G.* 32 [2] 422 *C.* 1903 [1] 838).
- \*25) 2,5-Dimethyl-1-Aethylindol. *Sm.* 47° (*D.R.P.* 137117 *C.* 1903 [1] 109).
- $C_{12}H_{15}N_3$  4) 3-Imido-1,4,5-Trimethyl-2-Phenyl-2,3-Dihydropyrazol. Carbonat, Chromat, Pikrat (*B.* 36, 3287 *C.* 1903 [2] 1190).
- 5) 3-Methylimido-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Pikrat (*B.* 36, 3286 *C.* 1903 [2] 1190).
- $C_{12}H_{15}Br_3$  \*2) 2,4,6-Tribrom-1,3,5-Triäthylbenzol. *Sm.* 103,5—104° (*J. pr.* [2] 68, 212 *C.* 1903 [2] 1114).
- 3) 3,5,6-Tribrom-1,2,4-Triäthylbenzol. *Sm.* 88—90° (*B.* 36, 1634 *C.* 1903 [2] 25).
- $C_{12}H_{16}O$  \*1)  $\delta$ -Oxy- $\delta$ -Phenyl- $\alpha$ -Hexen (*C.* 1904 [1] 1343).
- 31) 1-Oxy-1-Phenylhexahydrobenzol. *Sm.* 61°; *Sd.* 153°<sub>20</sub> u. Zers. (*C. r.* 138, 1322 *C.* 1904 [2] 219).
- 32) Methyläther d.  $\gamma$ -[2-Oxyphenyl]- $\beta$ -Penten. *Sd.* 134—136°<sub>35</sub> (*Bl.* [3] 29, 354 *C.* 1903 [1] 1222).
- 33) Methyläther d.  $\gamma$ -[4-Oxyphenyl]- $\beta$ -Penten. *Sd.* 129—130°<sub>17</sub> (*B.* 37, 3998 *C.* 1904 [2] 1641).
- 34) Aethyläther d.  $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Buten. *Sd.* 126—127°<sub>10</sub> (*B.* 37, 4000 *C.* 1904 [2] 1641).
- 35) Aethyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -Methylpropen. *Sd.* 128°<sub>15</sub> (*B.* 37, 4001 *C.* 1904 [2] 1641).
- 36) Isobutyläther d.  $\beta$ -Oxy- $\alpha$ -Phenyläthen. *Sd.* 248—251° (*C. r.* 138, 288 *C.* 1904 [1] 720; *Bl.* [3] 31, 528 *C.* 1904 [1] 1552).
- 37) Methyl-2,5-Diäthylphenylketon. *Sd.* 246—247°<sub>789</sub> (*B.* 36, 1633 *C.* 1903 [2] 25).
- 38) Aldehyd d. Methyltertiärbutylbenzolcarbonsäure (*D.R.P.* 94019) — \*III, 45.
- $C_{12}H_{18}O_2$  \*9) Aethyläther d. Isopropyl-4-Oxyphenylketon. *Sm.* 41°; *Sd.* 170 bis 171°<sub>22</sub> (*B.* 37, 4001 *C.* 1904 [2] 1641).
- \*20) 3-tert. Butyl-1-Methylbenzol-5-Carbonsäure. *Sm.* 158—159°. Ba +  $\frac{1}{2}H_2O$ , Cu +  $2H_2O$  (*C.* 1904 [1] 1498).
- 59) Methyl-4-Oxy-2-Methyl-5-Isopropylphenylketon (*C.* 1904 [1] 1597).
- 60)  $\gamma$ -[4-Methylphenyl]valeriansäure. *Sd.* 176°<sub>10</sub> (*C.* 1904 [1] 1416).
- 61)  $\alpha$ -Phenylbutan- $\beta$ -Methylcarbonsäure. *Sm.* 22°; *Sd.* 134°<sub>1</sub>. Ca +  $3H_2O$  (*C.* 1904 [1] 1259).
- $C_{12}H_{18}O_3$  \*1) Asaron. Pikrat (*C.* 1904 [2] 954).
- \*56) Aethylester d.  $\alpha$ -Oxy- $\alpha$ -Phenylbuttersäure. *Sd.* 143°<sub>20</sub> (*C.* 1903 [1] 225).
- 59) Aethylester d.  $\beta$ -Oxy- $\beta$ -Phenyl- $\alpha$ -Methylpropionsäure. *Fl.* (*J. r.* 28, 597). — \*II, 935.
- $C_{12}H_{18}O_4$  \*6) 4-Methyläther d. Propyl-2,4,6-Trioxo-3-Methylphenylketon (Aspidinol) (*A.* 329, 286 *C.* 1904 [1] 796; *Ar.* 242, 496 *C.* 1904 [2] 1418).
- 24) 1-Keto-2,4-Diacetyl-2-Oxymethyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. *Sm.* 69° (*B.* 36, 2167 *C.* 1903 [2] 371).
- 25) 3,6-Dioxy-2,5-Diisopropyl-1,4-Benzochinon. *Sm.* 154°. Na<sub>2</sub> +  $2C_2H_5O$  (*B.* 37, 2389 *C.* 1904 [2] 308).
- 26)  $\alpha$ -Oxy- $\alpha$ -[4-Methoxyphenyl]- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. *Sm.* 110°. Na +  $4H_2O$ , K +  $H_2O$ , Ba +  $4H_2O$  (*C.* 1903 [2] 566).
- 27) Säure (aus d. Cyanhydrin  $C_{12}H_{18}ON_2$ ) (*C.* 1904 [1] 1083).
- 28) Methylster d.  $\beta\beta$ -Dioxy- $\beta$ -Phenylpropiondimethyläthersäure. *Sd.* 146—147°<sub>18</sub> (*C. r.* 137, 260 *C.* 1903 [2] 103; *Bl.* [3] 31, 528 *C.* 1904 [1] 1602).
- 29) Dimethylester d. 2-Methyl-R-Penten-5-Carbonsäure-4-[Aethyl- $\beta$ -Carbonsäure]. *Sd.* 290° (*B.* 36, 949 *C.* 1903 [1] 1021).

- $C_{12}H_{16}O_4$  30) Monoäthylester d. 2-Methyl-R-Penten-5-Carbonsäure-4-[Aethyl- $\beta$ -Carbonsäure]. Sm. 103—104°. Ag (B. 36, 948 C. 1903 [1] 1021).
- $C_{12}H_{16}O_5$  18) 3,4-Methylenäther-2,5-Dimethyläther d. 2,3,4,5-Tetraoxy-1-[ $\alpha$ -oder- $\beta$ -Oxypropyl]benzol. Sm. 120° (B. 36, 3584 C. 1903 [2] 1364).
- 19) Oxyessig-2,3-Diäthoxyphenyläthersäure (Pyrogallolglykoldiäthyläthersäure). Sm. 82—83° (D.R.P. 155568).
- 20) 2,4,6-Trioxy-1,3-Dimethylbenzoltrimethyläther-1-Carbonsäure. Sm. 125—126° (M. 24, 107 C. 1903 [1] 966).
- 21) Methylester d. 2,4,6-Trioxy-1,3-Dimethylbenzol-2,4-Dimethyläther-5-Carbonsäure. Sm. 50—51° (M. 24, 113 C. 1903 [1] 967).
- 22) Äthylester d. 2,4,6-Trioxybenzoltrimethyläther-1-Carbonsäure. Sm. 77—78° (M. 24, 874 C. 1904 [1] 368).
- $C_{12}H_{16}O_6$  10) Dimethylester d. Diketocamphersäure. Sm. 85—88°. Cu (B. 36, 4333 C. 1904 [1] 456).
- $C_{12}H_{16}O_7$  \*2) Pikroerythrin (Bl. [3] 31, 613 C. 1904 [2] 99).
- $C_{12}H_{16}O_8$  17) Säure (aus Cholesterin).  $Ca_2 + 8H_2O$ ,  $Cu_2 + H_2O$  (M. 24, 181 C. 1903 [2] 20).
- $C_{12}H_{16}N_2$  11) Nitril d.  $\alpha$ -Diäthylamidophenyllessigsäure. Sd. 142°<sub>18</sub> (B. 36, 4192 C. 1904 [1] 263).
- $C_{12}H_{16}N_4$  C 66,7 — H 7,4 — N 25,9 — M. G. 216.
- 1) 2,3-Di[Aethylamido]-1,4-Benzdiazin. Sm. 156° (B. 36, 4050 C. 1904 [1] 184).
- $C_{12}H_{16}Br_2$  \*5) 4,6-Dibrom-2-Propyl-1,3,5-Trimethylbenzol. Sm. 56—57° (B. 37, 1719 C. 1904 [1] 1489).
- 6)  $\beta\gamma$ -Dibrom- $\delta$ -Phenyl- $\beta$ -Methylpentan. Fl. (B. 37, 2307 C. 1904 [2] 216).
- 7)  $d\text{-}\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\gamma$ -Methylpentan. Sm. 91—92° (B. 37, 654 C. 1904 [1] 937).
- 8)  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -Äthylbutan. Fl. (B. 37, 1724 C. 1904 [1] 1515).
- 9) 4-[ $\alpha\beta$ -Dibromisoamyl]-1-Methylbenzol. Sm. 85° (B. 37, 1089 C. 1904 [1] 1260).
- $C_{12}H_{16}J_2$  1) 4-[ $\alpha\beta$ -Dijodisoamyl]-1-Methylbenzol. Sm. 106—107° (B. 37, 1090 C. 1904 [1] 1260).
- $C_{12}H_{17}N$  \*9) 1-Benzylhexahydropyridin. Sd. 245°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 37, 2920 C. 1904 [2] 1237; B. 37, 3232 C. 1904 [2] 1152).
- 37) Äthylallyl-4-Methylphenylamin. Sd. 238°. Pikrat (B. 37, 2717 C. 1904 [2] 591).
- 38) Phenylamidohexahydrobenzol. Sd. 275° u. Zers. HCl (C. r. 138, 459 C. 1904 [1] 884).
- 39) 1-3-Benzylhexahydropyridin. Sd. 278—279°. (2HCl, PtCl<sub>4</sub>) (B. 36, 2713 C. 1903 [2] 838).
- 40) Nitril d. Cyklocitrylidenessigsäure. Sd. 141°<sub>17</sub> (D.R.P. 153575 C. 1904 [2] 678).
- $C_{12}H_{17}Cl$  5)  $\gamma$ -Chlor- $\gamma$ -Benzylpentan. Fl. (B. 37, 1724 C. 1904 [1] 1515).
- 6)  $\gamma$ -Chlor- $\gamma$ -Phenyl- $\beta$ -Methylpentan. Fl. (B. 37, 1725 C. 1904 [1] 1515).
- $C_{12}H_{18}O$  \*19) Xyliton (L. BLACH, Dissert., Heidelberg 1900).
- \*22)  $\alpha$ -Oxy- $\alpha$ -[2,4,6-Trimethylphenyl]propan. Sd. 142°<sub>14</sub> (B. 37, 927 C. 1904 [1] 1209).
- 25)  $\gamma$ -Oxy- $\gamma$ -Benzylpentan. Sd. 243—245°<sub>765</sub> (B. 37, 1724 C. 1904 [1] 1515).
- 26)  $\gamma$ -Oxy- $\gamma$ -Phenyl- $\beta$ -Methylpentan. Sd. 224—226° u. Zers. (B. 37, 1724 C. 1904 [1] 1515).
- 27)  $\delta$ -Oxy- $\delta$ -Phenyl- $\beta$ -Methylpentan. Sd. 110—112°<sub>12</sub> (B. 37, 2307 C. 1904 [2] 216).
- 28)  $\gamma$ -Oxy- $\alpha$ -Phenyl- $\gamma$ -Methylpentan. Sd. 129—130°<sub>13</sub> (B. 37, 2317 C. 1904 [2] 217).
- 29)  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Äthylbutan. Sd. 245° (C. 1904 [1] 1496).
- 30) Äthyläther d.  $\alpha$ -[2-Oxyphenyl]butan. Sd. 124—125°<sub>19</sub> (B. 37, 4000 C. 1904 [2] 1641).
- 31) 4-Keto-6-Isobutenyl-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sd. 132—134°<sub>12</sub> (L. BLACH, Dissert., Heidelberg 1900).
- 32) Isoxyliton. Sd. 129—130°<sub>11</sub> (L. BLACH, Dissert., Heidelberg 1900).
- 33) Äthylidenecampher. Sd. 110—115°<sub>10</sub> (C. r. 138, 578 C. 1904 [1] 948).
- $C_{12}H_{18}O_2$  29) 2-Methyläther d.  $\gamma$ -Oxy- $\gamma$ -[2-Oxyphenyl]pentan. Sd. 142°<sub>18</sub> (Bl. [3] 29, 352 C. 1903 [1] 1222).

- $C_{12}H_{18}O_2$  30) Diäthyläther d.  $\beta\beta$ -Dioxy- $\alpha$ -Phenyläthan. Sd. 245—246° (B. 37, 188 C. 1904 [1] 638).  
 31)  $\alpha$ -Phenyläther d.  $\alpha\beta$ -Dioxy- $\beta$ -Aethylbutan. Sd. 140—142°<sub>12</sub> (C. r. 138, 91 C. 1904 [1] 505).  
 32) Acetylcampher (Oxyäthylidencampher). Sd. 127°<sub>11</sub>. Cu (B. 36, 2628, 2638 C. 1903 [2] 626; B. 36, 4282 C. 1904 [1] 458; B. 37, 755 C. 1904 [1] 1083; B. 37, 763 C. 1904 [1] 1085; B. 37, 2181 C. 1904 [2] 224).  
 33) Cyklocitrylidenessigsäure (D.R.P. 153 575 C. 1904 [2] 677).  
 34) Acetat d. Alkohol  $C_{10}H_{16}O$  (aus Gingergrasöl). Sd. 90—91°<sub>4</sub> (C. 1904 [1] 1264).
- $C_{12}H_{18}O_3$  \*16) Methylester d. Camphocarbonsäure. Sd. 162°<sub>18</sub>. Na, Fe (B. 36, 672 C. 1903 [1] 772; B. 36, 1310 C. 1903 [1] 1225; C. r. 136, 240 C. 1903, [1] 584; B. 37, 2515 C. 1904 [2] 332; B. 37, 3947 C. 1904 [2] 1569).  
 27) 2-Methyläther d.  $\beta\gamma$ -Dioxy- $\gamma$ -[2-Oxyphenyl]pentan. Fl. (Bl. [3] 29, 355 C. 1903 [1] 1222).  
 28) Trimethyläther d. 2,3,5-Trioxy-1-Propylbenzol. Sd. 144—146°<sub>12</sub> (B. 36, 1718 C. 1903 [2] 114).  
 29) 3-Propyläther d. 2,3,5-Trioxy-1-Propylbenzol. Sm. 102° (B. 36, 1721 C. 1903 [2] 114).  
 30) Aethylester d. 4-Keto-2,2,6-Trimethyl-1,2,3,4-Tetrahydrobenzol-1-Carbonsäure. Sd. 146—148°<sub>18</sub> (D.R.P. 148 080 C. 1904 [1] 328).  
 31) Aethylester d. 4-Keto-1-Methyl-3-Allyl-R-Pentamethylen-3-Carbonsäure. Sd. 139—141°<sub>18</sub> (C. r. 136, 1614 C. 1903 [2] 440).  
 32) Aethylester d. 3-Keto-1-Methyl-2-Allyl-R-Pentamethylen-2-Carbonsäure. Sd. 139—141°<sub>18</sub> (C. r. 138, 210 C. 1904 [1] 663).  
 33) Acetat d. 5-Oxy-7-Keto-1-Methylbicyklo-[1,3,3]-Nonan. Sd. 172 bis 176°<sub>16</sub> (B. 37, 1673 C. 1904 [1] 1607).
- $C_{12}H_{18}O_4$  19)  $\alpha\alpha\gamma\gamma$ -Tetraacetyl- $\beta$ -Methylpropan (Aethylidenbisacetylaceton). Sm. 108° (B. 36, 2150 C. 1903 [2] 369).  
 20)  $\gamma\delta$ -Lakton d.  $\epsilon$ -Oxy- $\beta\delta$ -Dimethyl- $\beta$ -Hexadien- $\gamma\delta$ -Dicarbonsäure- $\delta$ -Aethylester. Sm. 75°; Sd. 165°<sub>12</sub> (J. pr. [2] 67, 197 C. 1903 [1] 869).  
 21) Monoäthylester d.  $\beta\delta$ -Dimethyl- $\beta\delta$ -Hexen- $\gamma\delta$ -Dicarbonsäure. Sm. 49° (J. pr. [2] 67, 198 C. 1903 [1] 869).
- $C_{12}H_{18}O_5$  7)  $\beta\beta\delta\delta$ -Tetraacetyl- $\alpha$ -Oxybutan. Sm. 91° (B. 36, 2165 C. 1903 [2] 371).
- $C_{12}H_{18}O_6$  \*3) Diäthylester d.  $\beta\delta$ -Dioxy- $\beta\delta$ -Hexadien- $\gamma\delta$ -Dicarbonsäure (B. 37, 3490 C. 1904 [2] 1288).  
 \*10) Triäthylester d. Aconitsäure (B. 36, 279 C. 1903 [1] 440).  
 18) Dimethylester d. Anemonolsäure. Sm. 93—94° (M. 20, 641). — \*III, 456.  
 19) isom. Triäthylester d. Isaconitsäure. Sd. 173—176°<sub>16</sub> (C. 1903 [1] 628).  
 20) Triäthylester d. Propen- $\alpha\alpha\gamma$ -Tricarbonsäure. Sd. 173—176°<sub>16</sub> (Soc. 85, 864 C. 1904 [2] 512).
- $C_{12}H_{18}O_7$  7) Diäthylester d.  $\beta$ -Oxy- $\gamma$ -Keto- $\beta$ -Acetylbutan- $\alpha\alpha$ -Dicarbonsäure. Sm. 53° (B. 36, 3228 C. 1903 [2] 941).
- $C_{12}H_{18}O_8$  \*2) Glykosetriacetat (Am. 28, 370 C. 1903 [1] 76).
- $C_{12}H_{18}N$  20) Methylisobutylbenzylamin. Sd. 115—118°<sub>80</sub> (Soc. 83, 1412 C. 1904 [1] 438).
- $C_{12}H_{20}O$  \*3) Myroxocerin. Sm. 120—130° (C. 1904 [2] 1047).  
 8) 4-[ $\beta$ -Ketobutyl]-1,1,3-Trimethyl-2,3-Dihydro-R-Penten (Aethylcampholenon). Sd. 222—225° (Bl. [3] 31, 465 C. 1904 [1] 1516).  
 9) Verbindung (aus d. Glykol  $C_{12}H_{22}O_2$ ). Sd. 115—117°<sub>30</sub> (M. 24, 165 C. 1903 [1] 957).  
 10) Verbindung (aus Leberpigment). Sd. 208—212° (C. 1904 [2] 665).  
 11) Verbindung (aus  $\alpha\gamma$ -Dioxybutan). Sd. 200° (M. 25, 10 C. 1904 [1] 716).
- $C_{12}H_{20}O_2$  \*12) Acetat d. Isoborneol. Sd. 106°<sub>14</sub> (C. r. 136, 239 C. 1903 [1] 584).  
 \*20) Acetat d. 1-Linalool (J. pr. [2] 66, 495 C. 1903 [1] 516).  
 42)  $\alpha$ -Oxyäthylcampher. Sd. 223—226°<sub>753,3</sub> (B. 36, 2628 C. 1903 [2] 625).  
 43)  $\alpha$ -Undekin- $\alpha$ -Carbonsäure. Sm. 30° (C. r. 136, 554 C. 1903 [1] 825).  
 44)  $\beta\epsilon$ -Dimethyl- $\alpha\delta$ -Nonadien- $\iota$ -Carbonsäure (Citronellidenessigsäure). Sd. 175,5—177,5°<sub>14</sub>. Ni (B. 36, 2797 C. 1903 [2] 877).

- $C_{12}H_{20}O_2$  45) Aethylester d.  $\alpha$ -Nonin- $\alpha$ -Carbonsäure. Sd. 143—146°<sub>21</sub> (C. r. 136, 554 C. 1903 [1] 825).  
 46) Aethylester d. 1,1,3-Trimethyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure<sup>P</sup> Sd. 95—98°<sub>13</sub> (D.R.P. 148206 C. 1904 [1] 486).  
 47) Isopropylester d.  $\alpha$ -Oktin- $\alpha$ -Carbonsäure. Sd. 145—148°<sub>32</sub> (C. r. 136, 554 C. 1903 [1] 825).  
 48) Acetat d. Campholenalkohol. Sd. 228—229° (C. r. 138, 280 C. 1904 [1] 725).  
 49) Acetat d. Cyklogeraniol. Sd. 130—132°<sub>30</sub> (D.R.P. 138141 C. 1903 [1] 267).  
 50) Acetat d. Nerol. Sd. 134°<sub>25</sub> (B. 36, 267 C. 1903 [1] 585). — \*III, 350.
- $C_{12}H_{20}O_3$  14) Aethylester d.  $\delta$ -Oxy- $\alpha$ - $\zeta$ -Heptadien- $\delta$ -[Aethyl- $\beta$ -Carbonsäure] (A. d.  $\gamma$ -Oxy- $\gamma$ -Diallylbuttersäure). Sd. 244—250° (C. 1904 [1] 1330).  
 15) Aethylester d. 5-Keto-1,1,3-Trimethylhexahydrobenzol-2-Carbonsäure. Sd. 132—133°<sub>12</sub> (D.R.P. 148207 C. 1904 [1] 487).  
 16) Aethylester d. 3-Keto-1-Methyl-2-Propyl-R-Pentamethylen-2-Carbonsäure. Sd. 136—137°<sub>17</sub> (C. r. 138, 210 C. 1904 [1] 663).  
 17) Aethylester d. 4-Keto-1-Methyl-3-Propyl-R-Pentamethylen-3-Carbonsäure. Sd. 136—137°<sub>17</sub> (C. r. 136, 1614 C. 1903 [2] 440).  
 18) Verbindung (aus d. Verb.  $C_{12}H_{22}O_4$  aus Guttapercha). Fl. (C. 1903 [1] 83).
- $C_{12}H_{20}O_4$  41)  $\alpha$ -Methylhomocampfersäure. Sm. 178—180° (C. r. 118, 690; C. r. 137, 1068 C. 1904 [1] 283).  
 42)  $\beta$ -Methylhomocampfersäure. Sm. 143°. Na<sub>2</sub> (C. r. 137, 1068 C. 1904 [1] 283).  
 43) Aethylester d.  $\epsilon\eta$ -Diketo- $\beta$ -Methyloktan- $\zeta$ -Carbonsäure. Sd. 133 bis 134°<sub>18</sub> (Bl. [3] 31, 598 C. 1904 [2] 26).  
 44) Diäthylester d.  $\delta$ -Methyl- $\beta$ -Penten- $\beta\delta$ -Dicarbonsäure. Sd. 139°<sub>24</sub> (C. r. 136, 1140 C. 1903 [1] 1405; Bl. [3] 29, 1025 C. 1903 [2] 1315).  
 45) Monomenthylester d. Oxalsäure. Fl. (C. 1903 [1] 162; B. 37, 1378 C. 1904 [1] 1441).
- $C_{12}H_{20}O_5$  14) Diäthylester d.  $\gamma$ -Keto- $\beta$ -Methylpentan- $\beta\delta$ -Dicarbonsäure. Sd. 195 bis 197°<sub>100</sub> (Soc. 83, 775 C. 1903 [2] 190, 422).
- $C_{12}H_{20}O_6$  24) Trimethylester d. Säure  $C_9H_{14}O_6$ . Sd. 194°<sub>20</sub> (Bl. [3] 29, 1046 C. 1903 [2] 1425).  
 25) Verbindung (aus Aethyloxalylchlorid). Sd. 143—144°<sub>13</sub> (C. r. 136, 1201 C. 1903 [2] 22).
- $C_{12}H_{22}O$  9)  $\delta$ -Oxy- $\beta\zeta$ -Dimethyl- $\beta\zeta$ -Dekadiär (Aethylmenthon). Sd. 120°<sub>14</sub> (D.R.P. 153120 C. 1904 [2] 624; D.R.P. 153120 C. 1904 [2] 1269).  
 10) 1-Oxydodekahydrobiphenyl. Sm. 51°; Sd. 148°<sub>30</sub> (C. r. 138, 1322 C. 1904 [2] 219).  
 11) 4-[ $\beta$ -Oxyisobutyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten (Dimethylcamphenol). Sd. 218—220° (Bl. [3] 31, 461 C. 1904 [1] 1516).  
 12) Aethylmenthon. Sd. 101—102°<sub>18</sub> (C. r. 138, 1140 C. 1904 [2] 106).  
 13) 1-Aethylmenthon. Sd. 106—108°<sub>15</sub> (C. 1904 [2] 1046).
- $C_{12}H_{22}O_2$  29) Glykol (aus Methyläthylakrolein). Sm. 89,5°; Sd. 165—170°<sub>11</sub> (M. 24, 157 C. 1903 [1] 956).  
 30) Diäthyläther d.  $\alpha\alpha$ -Dioxy- $\beta$ -Oktin. Sd. 110°<sub>11</sub> (C. r. 138, 1340 C. 1904 [2] 187).  
 31)  $\epsilon$ -[ $\beta$ -Oxyisobutyl]-1,1,2-Trimethyl-R-Pentamethylen-2,3-Oxyd. Sm. 142° (Bl. [3] 31, 466 C. 1904 [1] 1516).  
 32) Säure (aus Hefefett). Pb (H. 38, 8 C. 1903 [1] 1428).  
 33) Aethylester d. i-Citronellalsäure. Sd. 115°<sub>10</sub> (C. r. 138, 1701 C. 1904 [2] 440).
- $C_{12}H_{22}O_3$  30) Aethylester d.  $\beta$ -Oxy- $\alpha$ -Heptenäthyläther- $\alpha$ -Carbonsäure. Sd. 253 bis 253,5° (C. r. 138, 208 C. 1904 [1] 659; Bl. [3] 31, 512 C. 1904 [1] 1602).  
 31) Aethylester d. 5-Oxy-1,1,3-Trimethylhexahydrobenzol-2-Carbonsäure. Sd. 150—154°<sub>17</sub> (D.R.P. 148207 C. 1904 [1] 487).  
 32) Aethylester d.  $\alpha$ -Keto- $\beta$ -Methyloktan- $\alpha$ -Carbonsäure. Sd. 123 bis 124°<sub>12</sub> (Bl. [3] 31, 1153 C. 1904 [2] 1707).  
 33) Aethylester d.  $\beta$ -Keto- $\delta$ -Methyloktan- $\gamma$ -Carbonsäure. Sd. 243 bis 245°<sub>780</sub> (Soc. 81, 1594 C. 1903 [1] 15, 132).

- $C_{12}H_{22}O_4$  \*16) Diäthylester d.  $\beta\gamma$ -Dimethylbutan- $\beta\gamma$ -Dicarbonsäure (*Bl.* [3] 31, 116 *C.* 1904 [1] 643).  
 38) Dimethylester d.  $\beta$ -Methylheptan- $\gamma\zeta$ -Dicarbonsäure. *Sd.* 251° u. *Zers.* (*C. r.* 136, 458 *C.* 1903 [1] 696; *C.* 1904 [2] 1045).  
 39) Diäthylester d.  $\beta$ -Aethylbutan- $\alpha\alpha$ -Dicarbonsäure. *Sd.* 242—245° (*Bl.* [3] 31, 350 *C.* 1904 [1] 1134).  
 40) Diacetat d.  $\alpha\beta$ -Dioxyoktan. *Sd.* 163—168°<sub>11</sub> (*M.* 24, 404 *C.* 1903 [2] 620).  
 41) Diacetat d.  $\alpha\delta$ -Dioxy- $\beta\beta\delta$ -Trimethylpentan. *Sd.* 214—216° (*M.* 24, 602 *C.* 1903 [2] 1235).  
 42) Diacetat d.  $\gamma\delta$ -Dioxy- $\beta\beta\delta$ -Trimethylpentan. *Sd.* 122—123°<sub>13</sub> (*C.* 1904 [2] 1025).  
 43) Verbindung (aus Guttapercha). *Fl.* (*C.* 1903 [1] 83).
- $C_{12}H_{22}O_5$  \*5) Diäthylester d.  $\beta$ -Oxy- $\beta\gamma$ -Dimethylbutan- $\alpha\gamma$ -Dicarbonsäure (*Bl.* [3] 29, 1025 *C.* 1903 [2] 1315).  
 14) Anhydrid d.  $\beta$ -Oxy- $\alpha$ -Aethylbuttersäure. *Fl.* (*A.* 334, 114 *C.* 1904 [2] 888).  
 15) Aethylester d. Oxypivaloxypivalinsäure. *Sd.* 154°<sub>27</sub> (*Bl.* [3] 31, 129 *C.* 1904 [1] 644).  
 16) Diäthyläther d.  $\gamma$ -Oxybutanäthyläther- $\alpha\beta$ -Dicarbonsäure. *Sd.* 253 bis 255° (*A.* 330, 309 *C.* 1904 [1] 927).  
 17) Diäthylester d. Homopilomalsäure. *Sd.* 293°<sub>755</sub> (*B.* 33, 2361). — \*III, 687.
- $C_{12}H_{22}O_7$  2) Diäthylester d.  $\beta$ -Aethoxymethoxymethoxyläthan- $\alpha\alpha$ -Dicarbonsäure. *Fl.* (*C.* 1904 [2] 641).
- $C_{12}H_{22}O_{11}$  \*6) Isomaltose (*C.* 1904 [2] 1712).  
 \*10) Melibiose + 2H<sub>2</sub>O. *K, Na* (*C.* 1903 [2] 1243; 1904 [1] 1645).  
 \*12) Milchsucker (*Ph. Ch.* 44, 487 *C.* 1903 [2] 557).  
 \*15) Rohrzucker (*C. r.* 137, 1259 *C.* 1904 [1] 436; *C. r.* 138, 638 *C.* 1904 [1] 1068).  
 \*24) Gentiobiose (*C.* 1903 [1] 229).  
 29) Anhydriischer Milchsucker (*C.* 1904 [2] 1292).
- $C_{12}H_{22}O_{12}$  6) Zellobionsäure. *Fl.* (*Bl.* [3] 31, 857 *C.* 1904 [2] 645).
- $C_{12}H_{23}N$  \*1) Nitril d. Laurinsäure. *Sm.* 4°; *Sd.* 198°<sub>100</sub> (*Bl.* [3] 29, 1209 *C.* 1904 [1] 355).  
 \*4) Dimethylbornylamin. *Sd.* 210—213°<sub>700</sub>. (2HCl, PtCl<sub>4</sub>) (*Sor.* 85, 1195 *C.* 1904 [2] 1125).  
 6) Di[Hexahydrophenyl]amin. *Sm.* 20°; *Sd.* 145°<sub>90</sub> (250° u. *Zers.*). HCl (*C. r.* 138, 458 *C.* 1904 [1] 884).  
 7) Base (aus  $\alpha$ -Camphylamin). *Sd.* 215° (*C. r.* 136, 1463 *C.* 1903 [2] 287).  
 8) Nitril d.  $\beta\zeta$ -Dimethylnonan- $\varepsilon$ -Carbonsäure. *Sd.* 129—131°<sub>19</sub> (*Bl.* [3] 31, 307 *C.* 1904 [1] 1133).
- $C_{12}H_{24}O$  8) Aldehyd d.  $\beta\zeta$ -Dimethylnonan- $\varepsilon$ -Carbonsäure. *Sd.* 103—105°<sub>11</sub> (*C. r.* 138, 91 *C.* 1904 [1] 505; *Bl.* [3] 31, 306 *C.* 1904 [1] 1133).
- $C_{12}H_{24}O_2$  \*1) Laurinsäure. *Sm.* 44° (*Bl.* [3] 29, 1121 *C.* 1904 [1] 259).  
 \*20)  $\beta\zeta$ -Dimethylnonan- $\varepsilon$ -Carbonsäure. *Sm.* 46—47° (*Bl.* [3] 31, 307 *C.* 1904 [1] 1133).  
 26) 2-Oxy-3-[ $\beta$ -Oxyisobutyl]-1,1,2-Trimethyl-R-Pentamethylen (Dimethylcampholandiöl). *Sm.* 94° (*Bl.* [3] 31, 466 *C.* 1904 [1] 1516).  
 27) Säure (aus *Suberites domuncula*). *Sm.* 110° (*H.* 41, 121 *C.* 1904 [1] 997).  
 28) Acetat d.  $\varepsilon$ -Oxy- $\beta$ -Methyl- $\varepsilon$ -Aethylheptan. *Sd.* 93—94°<sub>14</sub> (*C. r.* 138, 154 *C.* 1904 [1] 577).
- $C_{12}H_{24}O_3$  \*6)  $\alpha$ -Isobutyryl d.  $\alpha\gamma$ -Dioxy- $\beta\beta\delta$ -Trimethylpentan (*M.* 25, 191 *C.* 1904 [1] 1000; *M.* 25, 251 *C.* 1904 [1] 1330).  
 14)  $\alpha$ -Oxyundekan- $\alpha$ -Carbonsäure. *Sm.* 73—74°. *Na, K, Cu* (*Bl.* [3] 29, 1124 *C.* 1904 [1] 261).
- $C_{12}H_{24}N_2$  8) Nitril d.  $\alpha$ -Diäthylamidoheptan- $\alpha$ -Carbonsäure. *Sd.* 125—126°<sub>11</sub> (*B.* 37, 4090 *C.* 1904 [2] 1725).
- $C_{12}H_{24}S_3$  1) trim.  $\beta$ -Thiobutan. *Sd.* 238°<sub>175</sub> (*C. r.* 136, 1460 *C.* 1903 [2] 282).
- $C_{12}H_{25}N$  4)  $\alpha$ -Isoamylimidoheptan. + NaHSO<sub>3</sub> (*C.* 1904 [2] 945).
- $C_{12}H_{26}O$  \*1)  $\alpha$ -Oxydodekan. *Sm.* 22,6° (*M.* 25, 348 *C.* 1904 [1] 1400; *Bl.* [3] 31, 674 *C.* 1904 [2] 184).
- $C_{12}H_{26}O_2$  8)  $\alpha$ -Aethyläther d.  $\alpha\beta$ -Dioxy- $\beta$ -Methylnonan. *Sd.* 130—133°<sub>18</sub> (*C. r.* 138, 92 *C.* 1904 [1] 505).

- $C_{12}H_{20}O_2$  9)  $\zeta$ -Aethyläther d.  $\varepsilon\zeta$ -Dioxy- $\varepsilon$ -Propyl- $\beta$ -Methylhexan. *Sd.* 109—113°<sub>12</sub> (*C. r.* 138, 92 *C.* 1904 [1] 505).
- 10)  $\varepsilon$ -Aethyläther d.  $\delta\varepsilon$ -Dioxy- $\beta$ -Methyl- $\delta$ -Isobutylpentan. *Sd.* 112 bis 113°<sub>23</sub> (*C. r.* 138, 91 *C.* 1904 [1] 505; *Bl.* [3] 31, 303 *C.* 1904 [1] 1133).
- $C_{12}O_4Br_6$  \*1) Hexabrom-1,2-Benzochinonbrenzkatechinäther (*Am.* 31, 98 *C.* 1904 [1] 802).

## — 12 III —

- $C_{12}H_2O_4Br_4$  1) Verbindung (aus Tribromresochinon) (*M.* 1, 350; 4, 223). — II, 922.
- $C_{12}H_2O_4Br_6$  \*2) Hexabromdi-o-Oxybrenzkatechinäther. *Sm.* 304—307° (*Am.* 30, 523 *C.* 1904 [1] 366).
- $C_{12}H_2O_5Br_8$  1)  $\alpha$ -Verbindung (aus 3,4,5,6-Tetrabrom-1,2-Benzochinon). *Zers.* bei 190 bis 200° (*B.* 36, 455 *C.* 1903 [1] 574; *Am.* 31, 109 *C.* 1904 [1] 802).
- 2)  $\beta$ -Verbindung (aus 3,4,5,6-Tetrabrom-1,2-Benzochinon). *Sm.* 221—222° (*B.* 36, 455 *C.* 1903 [1] 574; *Am.* 31, 110 *C.* 1904 [1] 802).
- $C_{12}H_5O_2Br$  1) 3-Brom-7,8-Acenaphtenchinon. *Sm.* 194° (*A.* 327, 87 *C.* 1903 [1] 1228).
- $C_{12}H_5O_3Br$  2) Anhydrid d. 4-Bromnaphtalin-1,8-Dicarbonsäure. *Sm.* 210° (*B.* 7, 1093; *A.* 327, 86 *C.* 1903 [1] 1228; *B.* 36, 3770 *C.* 1903 [2] 1445). — II, 1880.
- $C_{12}H_5O_5N$  \*1) Anhydrid d. 4-Nitronaphtalin-1,8-Dicarbonsäure. *Sm.* 220—222° (*B.* 36, 3772 *C.* 1903 [2] 1446).
- 2) Anhydrid d. 3-Nitronaphtalin-1,8-Dicarbonsäure. *Sm.* 247° (249°) (*B.* 32, 3248; *A.* 327, 84 *C.* 1903 [1] 1228).
- $C_{12}H_5O_8N_5$  \*1)  $\alpha$ -Tetranitrocarbazol. *Sm.* 285—286° (*B.* 37, 3597 *C.* 1904 [2] 1505).
- \*2)  $\beta$ -Tetranitrocarbazol. *Sm.* 273° (*B.* 37, 3597 *C.* 1904 [2] 1505).
- \*3)  $\gamma$ -Tetranitrocarbazol. *Sm.* 275° u. *Zers.* (*B.* 37, 3597 *C.* 1904 [2] 1505).
- \*4)  $\delta$ -Tetranitrocarbazol (*B.* 37, 3597 *C.* 1904 [2] 1505).
- $C_{12}H_5O_9N_5$  C 39,6 — H 1,4 — O 39,7 — N 19,3 — M. G. 363.
- 1) 3,5,7,9-Tetranitrophenoazin. *Zers.* bei 210° (*B.* 36, 480 *C.* 1903 [1] 651).
- $C_{12}H_5O_2N_2$  C 68,6 — H 2,8 — O 15,2 — N 13,3 — M. G. 210.
- 1) Peroxyd d. 7,8-Dioximidoacenaphten? *Sm.* 140° u. *Zers.* (*G.* 33 [1] 45 *C.* 1903 [1] 881).
- $C_{12}H_6O_4N_2$  3) Imid d. 4-Nitronaphtalin-1,8-Dicarbonsäure. *Sm.* 284° (*A.* 327, 83 *C.* 1903 [1] 1227).
- $C_{12}H_6O_5N_4$  C 50,3 — H 2,1 — O 28,0 — N 19,6 — M. G. 286.
- 1)  $\beta$ -Dinitro-5,10-Naphtdiazin-5,10-Oxyd. *Sm.* 240° (*B.* 36, 4143 *C.* 1904 [1] 186).
- 2) isom  $\beta$ -Dinitro-5,10-Naphtdiazin-5,10-Oxyd. *Sm.* 269° (*B.* 36, 4143 *C.* 1904 [1] 186).
- $C_{12}H_6O_7N_4$  C 45,3 — H 1,9 — O 35,2 — N 17,6 — M. G. 318.
- 1) 3,7,9-Trinitrophenoazin (*B.* 36, 482 *C.* 1903 [1] 652).
- $C_{12}H_6O_9N_6$  \*1) 3,5,3',5'-Tetranitroazoxybenzol. *Sm.* 183° (*Am.* 29, 116 *C.* 1903 [1] 709).
- $C_{12}H_6N_2Cl_2$  2) 2,3-Dichlor-1,4-Naphtisodiazin. *Sm.* 142° (*B.* 36, 4045 *C.* 1904 [1] 183).
- $C_{12}H_6N_2Cl_4$  \*1) 2,4,2',4'-Tetrachlorazobenzol. *Sm.* 161—162° (*A.* 330, 53 *C.* 1904 [1] 1141).
- $C_{12}H_6N_2Br_4$  2) 2,4,2',4'-Tetrabromazobenzol. *Sm.* 179° (*A.* 330, 54 *C.* 1904 [1] 1142).
- $C_{12}H_6Cl_2Br_2$  1) 3,3'-Dichlor-4,4'-Dibrombiphenyl. *Sm.* 176—177° (*Soc.* 85, 8 *C.* 1904 [1] 376, 728).
- $C_{12}H_6Cl_2J_2$  1) 3,3'-Dichlor-4,4'-Dijodbiphenyl. *Sm.* 162°; *Sd.* 275°<sub>10</sub> (*Soc.* 85, 8 *C.* 1904 [1] 376, 728).
- $C_{12}H_7O_2N$  \*2) 2-Naphtisatin (*B.* 36, 1736 *C.* 1903 [2] 118).
- 8) 7-Oximido-8-Ketoacenaphten. *Sm.* 230° (*G.* 33 [1] 42 *C.* 1903 [1] 881).
- $C_{12}H_7O_2Cl_3$  4) 3,5,3'-Trichlor-4,4'-Dioxybiphenyl. *Sm.* 179° (*Soc.* 85, 11 *C.* 1904 [1] 376, 729).
- $C_{12}H_7O_3N$  \*3) Anhydrid d. 3-Amidonaphtalin-1,8-Dicarbonsäure. *Sm.* noch nicht bei 360° (*A.* 327, 85 *C.* 1903 [1] 1228).
- 6) 2-Oxy-4,9-Diketo-4,9-Dihydro- $\beta\beta$ -Naphtindol (*E. Hoyer*, Dissert., Berlin 1901).
- 7) Anhydrid d. 2-Naphtisatosäure. *Sm.* 264° (*B.* 36, 1737 *C.* 1903 [2] 119).

- $C_{12}H_7O_4Br$  3) Benzoylbromisobrenzschleimsäure. Sm. 123° (*C. r.* 136, 50 *C.* 1903 [1] 443).  
 4) Acetat d. 3-Brom-2-Oxy-1,4-Naphtochinon. Sm. 134° (E. Hoyer, Dissert., Berlin 1901).
- $C_{12}H_7O_6N$  C 58,8 — H 2,8 — O 32,7 — N 5,7 — M. G. 245.  
 1) 1,2-Methylenätherester d. 4-Nitro-1-Oxynaphtalin-2-Carbonsäure. Sm. 167—168° (*A.* 330, 102 *C.* 1904 [1] 1076).
- $C_{12}H_7O_5N_3$  3) 3,9-Dinitrophenoxazin. Zers. oberh. 200° (*B.* 36, 478 *C.* 1903 [1] 651).
- $C_{12}H_7O_6N$  \*3) 4-Nitronaphtalin-1,8-Dicarbonsäure (*A.* 327, 82 *C.* 1903 [1] 1227).  
 $C_{12}H_7O_7N_3$  \*1) Phenyläther d. 2,4,6-Trinitro-1-Oxybenzol. Sm. 153° (*Ann.* 29, 213 *C.* 1903 [1] 964).
- $C_{12}H_7O_8N_5$  \*1) Di[2,4-Dinitrophenyl]amin. Sm. 197° (*C.* 1903 [2] 1109).  
 $C_{12}H_7O_9N_5$  4) 2',4',6',8'-Tetranitro-4-Oxydiphenylamin. Sm. 225,5° (*B.* 37, 1731 *C.* 1904 [1] 1521).
- $C_{12}H_7ClJ_4$  1) 3,3',5'-Trijoddiphenyljodoniumchlorid. 2 +  $PtCl_4$  (*B.* 37, 1309 *C.* 1904 [1] 1340).
- $C_{12}H_7BrJ_4$  1) 3,3',5'-Trijoddiphenyljodoniumbromid. Sm. 109° (*B.* 37, 1309 *C.* 1904 [1] 1340).
- $C_{12}H_8ON_2$  \*4) Diphenylenazonoxyd. Sm. 139° (*B.* 37, 24 *C.* 1904 [1] 523).  
 \*7) 5,10-Naphtdiazin-5,10-Oxyd. HCl (*B.* 36, 4142 *C.* 1904 [1] 186).  
 9) 7-Hydrazon-8-Ketoacenaphten. Sm. 240—241° (*G.* 33 [1] 47 *C.* 1903 [1] 882).
- $C_{12}H_8OJ_4$  1) 3,3',5'-Trijoddiphenyljodoniumhydroxyd. Salze siehe (*B.* 37, 1308 *C.* 1904 [1] 1340).
- $C_{12}H_8O_2N_2$  \*2) 7,8-Dioximidoacenaphten. Sm. 222° (*G.* 33 [1] 44 *C.* 1903 [1] 881).  
 \*12) 2,3-Dioxy-1,4-Naphtisodiazin (*B.* 35, 4305; *B.* 36, 4044 *C.* 1904 [1] 183).  
 17) Oxim d. 2-Naphtisatin. Sm. 186° u. Zers. (*B.* 36, 1738 *C.* 1903 [2] 119).  
 18) 3-Cyan-2-Methylchinolin-4-Carbonsäure. Sm. 238° u. Zers. (2HCl,  $PtCl_4$ ) (*J. pr.* [2] 67, 504 *C.* 1903 [2] 251).
- $C_{12}H_8O_2N_4$  \*2) 5-Nitro-1-Phenyl-1,2,3-Benztriazol. Sm. 167° (*A.* 332, 99 *C.* 1904 [1] 1570).
- $C_{12}H_8O_2Cl_2$  8) 3,3'-Dichlor-4,4'-Dioxybiphenyl. Sm. 124° (*Soe.* 83, 691 *C.* 1903 [2] 39; *Soe.* 85, 10 *C.* 1904 [1] 376, 729).
- $C_{12}H_8O_2Br_2$  3) Acetat d. 2,4-Dibrom-1-Oxynaphtalin. Sm. 92—93° (*A.* 333, 368 *C.* 1904 [2] 1117).
- $C_{12}H_8O_4N_2$  \*3) 2,2'-Dinitrobiphenyl. Sm. 124—126° (*B.* 36, 3747 *C.* 1904 [1] 38).  
 \*5) 4,4'-Dinitrobiphenyl (D.R.P. 147943 *C.* 1904 [1] 133).
- $C_{12}H_8O_4N_4$  \*5) 4,4'-Dinitroazobenzol. Sm. 216° (*A.* 330, 28 *C.* 1904 [1] 1141).  
 $C_{12}H_8O_4S$  1) 2-Phenylsulfon-1,4-Benzochinon (*A.* 334, 179 *C.* 1904 [2] 834).  
 $C_{12}H_8O_4S_4$  1) 1,3-Phenyleneester d. Benzol-1,3-Di[Thiolsulfonsäure] (*J. pr.* [2] 68, 319 *C.* 1903 [2] 1170).
- $C_{12}H_8O_5N_2$  \*2) 2,2'-Dinitrophenyläther. Sm. 114° (*R.* 23, 27 *C.* 1904 [1] 1137).  
 \*4) 4,4'-Dinitrodiphenyläther. Sm. 141° (*R.* 23, 27 *C.* 1904 [1] 1137).  
 8) 5-Benzoylpyrazol-3,4-Dicarbonsäure. Sm. 220° u. Zers. (*A.* 325, 189 *C.* 1903 [1] 647).
- $C_{12}H_8O_5N_4$  \*2) 3,3'-Dinitroazoxybenzol. Sm. 144—145° (141—142°) (*B.* 36, 3807 *C.* 1904 [1] 17; *C.* 1904 [2] 1383).  
 \*3) 4,4'-Dinitroazoxybenzol. Sm. 191,5° (*B.* 36, 3810, 3829 *C.* 1904 [1] 17; *R.* 23, 31 *C.* 1904 [1] 1137).  
 6) 2,2'-Dinitroazoxybenzol. Sm. 175—175,5° (*B.* 36, 3805, 3813 *C.* 1904 [1] 17).
- $C_{12}H_8O_5Cl_2$  3) Äthylester d. 6,8-Dichlor-4-Oxy-1,2-Benzpyron-3-Carbonsäure. Sm. 135° Na (*B.* 36, 463 *C.* 1903 [1] 636).
- $C_{12}H_8O_6N_2$  7) Nitroderivat d. Verbindung  $C_{12}H_8O_4N + H_2O$ . Sm. 218° (*R.* 23, 154 *C.* 1904 [2] 194).
- $C_{12}H_8O_6Cl_2$  1) Di[Chloracetat] d. 5,6-Dioxy-2-Keto-1,2-Dihydrobenzofuran. Sm. 168° (*B.* 37, 820 *C.* 1904 [1] 1151).
- $C_{12}H_8NCl$  \*1) 3-Chlore carbazol. Sm. 201,5° (*A.* 332, 96 *C.* 1904 [1] 1571).  
 2) 2-Chlore carbazol. Sm. 244° (*A.* 332, 97 *C.* 1904 [1] 1571).
- $C_{12}H_8N_2Cl_2$  \*4) 2,2'-Dichlorazobenzol. Sm. 136° (*J. pr.* [2] 67, 146 *C.* 1903 [1] 870).

- $C_{12}H_8N_3Cl$  3) 5-Chlor-1-Phenyl-1,2,3-Benztriazol. Sm. 142° (A. 332, 95 C. 1904 [1] 1571).  
 4) 2-[4-Chlorphenyl]-2,1,3-Benztriazol. Sm. 167,5—168,5 (B. 36, 3826 C. 1904 [1] 19).  
 5) 2-oder-3-Chlor-3-oder-2-Amido-1,4-Naphtisodiazin. Sm. 222° u. Zers. (B. 36, 4049 C. 1904 [1] 184).
- $C_{12}H_8N_3Br$  2) 2-[4-Bromphenyl]-2,1,3-Benztriazol. Sm. 174° (B. 36, 3825 C. 1904 [1] 18).
- $C_{12}H_8ClJ_2$  1) Di[3-Jodphenyl]jodoniumchlorid. Sm. 156°. 2 +  $PtCl_4$  (B. 37, 1308 C. 1904 [1] 1340).
- $C_{12}H_8Cl_2J_2$  2) Di[3-Chlorphenyl]jodoniumjodid. Sm. 132° (B. 37, 1316 C. 1904 [1] 1341).
- $C_{12}H_8Cl_2S_2$  \*1) Di[4-Chlorphenyl]disulfid. Sm. 70—71° (C. r. 138, 982 C. 1904 [1] 1413).  
 2) 2,2'-Dichlordiphenyldisulfid. Sm. 89—90° (C. 1904 [2] 1176).
- $C_{12}H_8Cl_2J$  2) Di[3-Chlorphenyl]jodoniumchlorid. Sm. 175—177°. 2 +  $HgCl_2$ , 2 +  $PtCl_4$  (B. 37, 1315 C. 1904 [1] 1341).
- $C_{12}H_8BrJ_3$  1) Di[3-Jodphenyl]jodoniumbromid. Zers. bei 163° (B. 37, 1308 C. 1904 [1] 1340).
- $C_{12}H_8Br_2J_2$  1) Di[3-Bromphenyl]jodoniumjodid. Sm. 154° (J. pr. [2] 69, 326 C. 1904 [2] 35).
- $C_{12}H_8Br_2S_2$  \*1) Di[4-Bromphenyl]disulfid. Sm. 93° (C. r. 138, 982 C. 1904 [1] 1413).
- $C_{12}H_8Br_2J$  1) Di[3-Bromphenyl]jodoniumbromid. Sm. 178° (J. pr. [2] 69, 326 C. 1904 [2] 35).
- $C_{12}H_8ON$  \*9) 3-Benzoylpyridin. Sm. 42°; Sd. 319°<sub>741</sub> (B. 36, 2711 C. 1903 [2] 837).
- $C_{12}H_8ON_3$  \*1) 2-Phenyl-1,1-Dihydro-2,1,3-Benztriazol-1-Oxyd (Azoazoxybenzol). Sm. 88,5° (B. 32, 3271; B. 36, 3824 C. 1904 [1] 18).  
 5) 2-[4-Oxyphenyl]-2,1,3-Benztriazol. Sm. 217—219° (J. pr. [2] 67, 581 C. 1903 [2] 204).  
 6) 3-Amido-2-Oxy-5,10-Naphtdiazin.  $HNO_3$  (B. 35, 4304 C. 1903 [1] 344).
- $C_{12}H_8OJ_3$  1) Di[3-Jodphenyl]jodoniumhydroxyd. Salze siehe (B. 37, 1308 C. 1904 [1] 1340).
- $C_{12}H_8O_2N$  \*1) 3-Nitroacenaphten. Sm. 106° (A. 327, 80 C. 1903 [1] 1227).  
 \*3) 3-Nitrobiphenyl. Sm. 61° (58,5°) (B. 36, 4083 C. 1904 [1] 268; B. 37, 882 C. 1904 [1] 1143).  
 \*16) Inn. Anhydrid d. Oxyessig-1-Amido-2-Naphtyläthersäure ( $\beta$ -Naphtomorpholon). Sm. 215—216° (Soc. 83, 759 C. 1903 [1] 1419 C. 1903 [2] 448).  
 17)  $\beta$ -[4-Chinolyl]akrylsäure. Sm. 250—255°. (2HCl,  $PtCl_4$  +  $1\frac{1}{2}H_2O$ ) (B. 37, 1338 C. 1904 [1] 1362).
- $C_{12}H_8O_2N_3$  \*2) 2-Nitroazobenzol. Sm. 70,5—71° (B. 36, 3818 C. 1904 [1] 18).  
 \*3) 3-Nitroazobenzol. Sm. 81—82° (B. 36, 2531 C. 1903 [2] 491; B. 36, 3811 C. 1904 [1] 17).  
 \*4) 4-Nitroazobenzol. Sm. 134—135° (B. 36, 3811 C. 1904 [1] 17).
- $C_{12}H_8O_2Cl$  8) 3-Chlor-4,4'-Dioxybiphenyl. Sm. 215° (Soc. 85, 10 C. 1904 [1] 376, 729).
- $C_{12}H_8O_3N$  26) 5-Acetylamido-1,4-Naphtochinon. Sm. 162° (B. 32, 2879; A. 335, 151 C. 1904 [2] 1136). — \*III, 276.
- $C_{12}H_8O_4N$  \*8) 2-Methylchinolin-3,4-Dicarbonsäure. Sm. 238—239° (J. pr. [2] 67, 506 C. 1903 [2] 252).  
 \*21) Verbindung +  $H_2O$  (aus d. Verb.  $C_{12}H_{10}O_3N_2$ ) (R. 23, 154 C. 1904 [2] 194).  
 22) 1,2-Methylenäther d. 4-Nitro-1-Oxy-2-Oxymethylnaphtalin. Sm. 149° (A. 330, 102 C. 1904 [1] 1076).  
 23) 4-Amidonaphtalin-1,8-Dicarbonsäure. Sm. 200° (A. 327, 83 C. 1903 [1] 1227).  
 24) 2-Phenylpyrrol-4,5-Dicarbonsäure. Sm. 250° (A. 331, 311 C. 1904 [2] 45).  
 25) Nitril d. 4,5-Dioxy-3-Acetoxy-1-Aethenylbenzol-4,5-Methylenäther-2-Carbonsäure (Norcotarmonnitrilacetat). Sm. 110° (B. 36, 1533 C. 1903 [2] 52).
- $C_{12}H_8O_4N_3$  \*1) 2,4-Dinitrodiphenylamin. Sm. 155—156° (J. pr. [2] 68, 254 C. 1903 [2] 1064).  
 8) 3,5-Dinitro-4-Amidobiphenyl. Sm. 233° (B. 37, 883 C. 1904 [1] 1143).

- $C_{12}H_9O_4N_3$  9) 6-Nitro-3,3'-Dioxyazobenzol. Sm. 205° (*J. pr.* [2] 67, 268 *C.* 1903 [1] 1221).
- $C_{12}H_9O_4Cl$  10) 2-Nitro-2'-Oxyazoxybenzol. Sm. 91–92° (*B.* 36, 3814 *C.* 1904 [1] 17).
- $C_{12}H_9O_4Cl$  \*5) Aethylester d. 2-Chlor-1,3-Diketo-2,3-Dihydroinden-2-Carbonsäure. Sm. 72–74° (*B.* 37, 1788 *C.* 1904 [1] 1484).
- $C_{12}H_9O_4Br$  \*1) Aethylester d. 2-Brom-1,3-Diketo-2,3-Dihydroinden-2-Carbonsäure. Sm. 72–74° (*B.* 37, 1788 *C.* 1904 [1] 1484).
- $C_{12}H_9O_6N$  \*5) Oxyessig-1-Nitro-2-Naphtyläthersäure. Sm. 188–189° (*Soc.* 83, 758 *C.* 1903 [1] 1419 *C.* 1903 [2] 448).
- $C_{12}H_9O_6N_3$  \*2) 2,4-Dinitro-4'-Oxydiphenylamin (D.R.P. 147862 *C.* 1904 [1] 235).
- 6) 2,4-Dinitro-4'-Amidodiphenyläther. Sm. 144°. HCl (*B.* 37, 1518 *C.* 1904 [1] 1596).
- $C_{12}H_9O_6N_5$  \*4) 3,2',4'-Trinitro-4'-Amidodiphenylamin. Sm. 226° (*B.* 37, 1727 *C.* 1904 [1] 1520).
- 8) 2,4,6-Trinitro-3-Amidodiphenylamin. Sm. 186° (*R.* 21, 325 *C.* 1903 [1] 79).
- $C_{12}H_9O_8N$  C 58,8 — H 3,0 — O 43,4 — N 4,7 — M. G. 295.
- 1) trans-1-[4-Nitrophenyl]-R-Trimethylen-1<sup>2</sup>, 2,3-Tricarbonsäure. Sm. 285–290° u. Zers. (*B.* 36, 3508 *C.* 1903 [2] 1274).
- $C_{12}H_9N_3Cl$  \*2) 4-Chlorazobenzol. Sm. 88–89° (*B.* 36, 4090 Anm. *C.* 1904 [1] 269).
- $C_{12}H_9N_3J$  \*1) 4-Jodazobenzol. Sm. 105° (*B.* 37, 1311 *C.* 1904 [1] 1341).
- $C_{12}H_9N_4Cl$  1) 7-Chlor-2,3-Diamido-5,10-Naphtdiazin. Sm. noch nicht bei 360°. HCl, HNO<sub>3</sub> (*B.* 36, 4029 *C.* 1904 [1] 294).
- $C_{12}H_9N_4Br$  1) 7-Brom-2,3-Diamido-5,10-Naphtdiazin. Sm. noch nicht bei 360° (*B.* 36, 4032 *C.* 1904 [1] 294).
- $C_{12}H_9ClJ_2$  2) 3-Chlordiphenyljodoniumjodid. Sm. 130° (*B.* 37, 1317 *C.* 1904 [1] 1341).
- 3) 3-Joddiphenyljodoniumchlorid. Sm. 134°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*B.* 37, 1306 *C.* 1904 [1] 1340).
- $C_{12}H_9Cl_2J$  1) 3-Chlordiphenyljodoniumchlorid. Sm. 163°. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*B.* 37, 1316 *C.* 1904 [1] 1341).
- $C_{12}H_9BrJ_2$  2) 3-Bromdiphenyljodoniumjodid. Sm. 146° (*J. pr.* [2] 69, 328 *C.* 1904 [2] 35).
- 3) 3-Joddiphenyljodoniumbromid. Sm. 169° (*B.* 37, 1307 *C.* 1904 [1] 1340).
- $C_{12}H_9Br_2J$  1) 3-Bromdiphenyljodoniumbromid. Sm. 169° (*J. pr.* [2] 69, 328 *C.* 1904 [2] 35).
- $C_{12}H_{10}ON_2$  \*1) Diphenylnitrosamin. Sm. 67,2–67,6° (*C.* 1903 [1] 326; *B.* 36, 2477 *C.* 1903 [2] 559).
- \*2) 4-Nitrosodiphenylamin. Sm. 145° (*B.* 36, 4136 *C.* 1904 [1] 185).
- \*4) Azoxybenzol. Sm. 38° (*C.* 1903 [1] 324; *R.* 22, 6 *C.* 1903 [1] 1082; *C.* 1904 [2] 1383).
- \*5) 4-Oxyazobenzol (*C.* 1903 [1] 325; *R.* 22, 8 *C.* 1903 [1] 1082; *B.* 36, 3010 *C.* 1903 [2] 1031; *C.* 1904 [2] 164; *C. r.* 138, 1278 *C.* 1904 [2] 97).
- \*18) 2-Oxyazobenzol. (2HCl, PtCl<sub>4</sub>) (*C.* 1903 [1] 325; *R.* 22, 8 *C.* 1903 [1] 1082; *B.* 36, 4105 Anm., 4107 *C.* 1904 [1] 271; *C.* 1904 [2] 164).
- 23) 3-Oxyazobenzol. Sm. 114–116°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 36, 4102 *C.* 1904 [1] 271; *C.* 1904 [2] 164).
- $C_{12}H_{10}OJ_2$  2) 3-Joddiphenyljodoniumhydroxyd. Salze siehe (*B.* 37, 1306 *C.* 1904 [1] 1340).
- $C_{12}H_{10}OS$  \*3) Diphenylsulfoxyd. Sm. 70° (*B.* 37, 2154 *C.* 1904 [2] 186).
- 6) 4-Oxydiphenylsulfid. Fl. (*B.* 36, 110 *C.* 1903 [1] 454; D.R.P. 147634 *C.* 1904 [1] 131).
- $C_{12}H_{10}O_2N_2$  \*11) 2,4-Dioxyazobenzol (*B.* 36, 3010 *C.* 1903 [2] 1031).
- \*27) 3,3'-Dioxyazobenzol. Sm. 205° (*J. pr.* [2] 67, 266 *C.* 1903 [1] 1221).
- 30) 3-Nitro-4-Amidobiphenyl. Sm. 167° (*B.* 37, 882 *C.* 1904 [1] 1143).
- 31) Nitril d.  $\alpha$ -Imido- $\beta$ -Benzoyl- $\gamma$ -Ketobutan- $\alpha$ -Carbonsäure. Sm. 121° (*A.* 332, 157 *C.* 1904 [2] 192).
- $C_{12}H_{10}O_2Br_2$  1) Dibrombenzncarencarbonsäure. Sm. 168° u. Zers. (*B.* 36, 3506 *C.* 1903 [2] 1274).
- $C_{12}H_{10}O_3N_2$  \*16) 3-Keto-4-Methyl-2-Phenyl-2,3-Dihydro-1,2-Diazin-6-Carbonsäure. Sm. 216° (*R.* 23, 146 *C.* 1904 [2] 193).
- 35) 3,3'-Dioxyazoxybenzol. Sm. 182° (*J. pr.* [2] 68, 476 *C.* 1904 [1] 443).

- $C_{12}H_{10}O_8N_2$  36) 5-Acetyl-4-Phenylpyrazol-3-Carbonsäure. Sm. 208° (A. 325, 185 C. 1903 [1] 646).
- 37) 5-Benzoyl-4-Methylpyrazol-3-Carbonsäure. Sm. 233° (A. 325, 188 C. 1903 [1] 647).
- 38) 5-Nitro-1-Naphtylamid d. Essigsäure. Sm. 220° (D.R.P. 145191 C. 1903 [2] 1098).
- $C_{12}H_{10}O_4N_2$  17) 4-Methylphenylamid d. p-Nitrofuran-2-Carbonsäure. Sm. 162° (C. r. 137, 521 C. 1903 [2] 1069).
- $C_{12}H_{10}O_4Br_4$  7)  $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha$ -Phenylbutan- $\delta\delta$ -Dicarbonsäure (A. 336, 223 C. 1904 [2] 1733).
- $C_{12}H_{10}O_4S$  \*2) 2,5-Dioxydiphenylsulfon. Sm. 195° (B. 36, 112 C. 1903 [1] 454).
- \*3) 3,4-Dioxydiphenylsulfon. Sm. 152—153° (B. 36, 112 C. 1903 [1] 454).
- $C_{12}H_{10}O_4S_3$  2) Benzolsulfoperoxyd. Zers. bei 53—54° (B. 36, 2702 C. 1903 [2] 992).
- $C_{12}H_{10}O_4S_3$  2) Diphenylsulfid-4,4'-Disulfinsäure. Sm. 107° (R. 22, 360 C. 1904 [1] 23).
- $C_{12}H_{10}O_5N_2$  15) Aethyläther d. 4,8-Dinitro-1-Oxynaphtalin. Sm. 115° (A. 335, 155 C. 1904 [2] 1136).
- $C_{12}H_{10}O_6S_3$  \*1) Diphenylsulfid-4,4'-Disulfonsäure (R. 22, 356 C. 1904 [1] 22).
- $C_{12}H_{10}O_7N_2$  \*2)  $\alpha\gamma\epsilon$ -Triketo- $\alpha$ -[3,5-Dinitrophenyl]hexan. Sm. 153° (J. pr. [2] 69, 456 C. 1904 [2] 595).
- $C_{12}H_{10}O_{10}N_2$  C 42,1 — H 2,9 — O 46,8 — N 8,2 — M. G. 342.
- 1) Triacetat d. 4,6-Dinitro-1,2,3-Trioxylbenzol. Sm. 154° (B. 37, 121 C. 1904 [1] 586).
- $C_{12}H_{10}N_2Br_2$  10) 4-[ $\alpha\beta$ -Dibrom- $\beta$ -Phenyläthyl]-1,3-Diazin. Sm. 225—226° u. Zers. (B. 36, 3384 C. 1903 [2] 1193).
- $C_{12}H_{10}N_2Si$  \*1) Silicodiphenyldiimid (See. 83, 252 C. 1903 [1] 572, 875).
- $C_{12}H_{10}BrTi$  1) Thalliumdiphenylbromid. Zers. oberh. 270° (B. 37, 2060 C. 1904 [2] 20).
- $C_{12}H_{11}ON$  25) 2-Amido-p-Acetylnaphtalin. Sm. 106° (D. R. P. 56971). — \*III, 142.
- 26) 2-[ $\alpha$ -Oxybenzyl]pyridin (Phenyl- $\alpha$ -Pyridylcarbinol). Sm. 82°. (2HCl, PtCl<sub>4</sub>) (B. 37, 1371 C. 1904 [1] 1358).
- 27) 4-[ $\alpha$ -Oxybenzyl]pyridin. Sm. 126°. (2HCl, PtCl<sub>4</sub>) (B. 37, 1372 C. 1904 [1] 1358).
- 28) Amid d. Benznorcaradiëncarbonsäure. Sm. 217° (B. 36, 3506 C. 1903 [2] 1274).
- $C_{12}H_{11}ON_3$  \*6) 1-Phenylloxyamidodiazobenzol. Sm. 126—127° (B. 35, 3895 C. 1903 [1] 28).
- 12) 4-Oxy-1-Phenylamidodiazobenzol. Sm. 80° (B. 36, 4146 C. 1904 [1] 186).
- $C_{12}H_{11}ON_5$  2) Amid d. Methyl-4-Dicyanmethylenamidophenylamidoessigsäure. Sm. 211° (B. 37, 2638 C. 1904 [2] 519).
- $C_{12}H_{11}O_2N$  \*35) Aethylbetaïn d. Chinolin-4-Carbonsäure. Sm. 204° (M. 24, 201 C. 1903 [2] 48).
- 64)  $\beta$ -[4-Chinolyl]propionsäure. Sm. 202—303° (B. 37, 1339 C. 1904 [1] 1362).
- 65) 2-Methylphenylamid d. Furan-2-Carbonsäure. Sm. 62° (B. 37, 2955 C. 1904 [2] 993).
- 66) 3-Methylphenylamid d. Furan-2-Carbonsäure. Sm. 87° (B. 37, 2955 C. 1904 [2] 993).
- 67) 4-Methylphenylamid d. Furan-2-Carbonsäure. Sm. 107,5° (B. 37, 2954 C. 1904 [2] 993).
- 68) Phenylimid d.  $\alpha$ -Buten- $\alpha\beta$ -Dicarbonsäure. Sm. 108—109° (B. 37, 2383 C. 1904 [2] 306).
- 69) Verbindung (aus  $\beta$ -Benzallävulinsäure). Sm. 94° (A. 258, 132). — \*II, 986.
- $C_{12}H_{11}O_3N_3$  \*1) 4-Nitro-2-Amidodiphenylamin. Sm. 131° (134°) (J. pr. [2] 69, 41 C. 1904 [1] 520; A. 332, 99 C. 1904 [1] 1570).
- \*16) 4-Nitro-4'-Amidodiphenylamin (D. R. P. 145061 C. 1903 [2] 973).
- 24) 3-Nitro-4,4'-Diamidobiphenyl. Sm. 190° (B. 37, 2883 C. 1904 [2] 594).
- 25) 3,9-Diamidophenoxazoniumhydroxyd. Chlorid + H<sub>2</sub>O, 2Chlorid + PtCl<sub>4</sub>, Bichromat (B. 36, 479 C. 1903 [1] 651).
- $C_{12}H_{11}O_3N_5$  3) Dimethylureidamidoazin (A. 333, 44 C. 1904 [2] 771).

- $C_{12}H_{11}O_9N$  \*28) Aethylester d. Benzoylcyanessigsäure. Sm. 37,5° (A. 332, 150 C. 1904 [2] 192).
- 47)  $\alpha$ -Phtalylamido- $\beta$ -Ketobutan. Sm. 107° (B. 37, 2475 C. 1904 [2] 418).
- 48) 1-Keto-4-Oxy-3-Propionyl-1,2-Dihydroisochinolin. Sm. 231—232° (B. 37, 2485 C. 1904 [2] 420).
- 49) Methylester d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\beta$ -Phenylakrylmethyläthersäure. Sm. 127—128° (C. r. 136, 691 C. 1903 [1] 920).
- $C_{12}H_{11}O_8N_3$  \*9) 2[oder 4]-Nitro-4[oder 2]-Amido-4'-Oxydiphenylamin. Sm. 204 bis 205° (D.R.P. 144157 C. 1903 [2] 814).
- 13) Acetyl-4-Methylphenylhydrazoncyanessigsäure. Sm. 225° (J. pr. [2] 67, 407 C. 1903 [1] 1347).
- $C_{12}H_{11}O_8Cl$  2) Aethylester d. 4-Chlormethylbenzfuran-1-Carbonsäure. Sm. 65 bis 66° (B. 37, 199 C. 1904 [1] 661).
- $C_{12}H_{11}O_8Br$  4) Bromoxynorcarenearbonsäure. Sm. 170—173° u. Zers. (B. 36, 3507 C. 1903 [2] 1274).
- $C_{12}H_{11}O_8Br_3$  2) 4-Acetat d. 2,5,6-Tribrom-3,4-Dioxy-1-[ $\alpha\beta$ -Dibrompropyl]benzol-3-Methyläther. Sm. 175° (A. 329, 36 C. 1903 [2] 1437).
- $C_{12}H_{11}O_4N$  22)  $\gamma$ -Keto- $\beta$ -Acetyl- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten. Sm. 101—102° (Soc. 83, 1374 C. 1904 [1] 164, 450).
- 23) 6-[ $\alpha$ -Oxypropionyl]amido-1,2-Benzpyron. Sm. 159—160° (Soc. 85, 1234 C. 1904 [2] 1124).
- 24) 6,7-Dioxy-2-Methylehinolin-6-Methyläther-5-Carbonsäure. Sm. 212° (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O) (B. 36, 2211 C. 1903 [2] 444).
- $C_{12}H_{11}O_4N_3$  \*1) 2,4-Diacetyl-3,5-Diketo-1-Phenyltetrahydro-1,2,4-Triazol. Sm. 162° (Am. 30, 38 C. 1903 [2] 363).
- 7) Acetat d. 4-[ $\alpha$ -Oximido- $\alpha$ -Phenyläthyl]-1,2,3,6-Dioxiazin. Sm. 150 bis 154° (A. 330, 239 C. 1904 [1] 945).
- 8) Diacetat d. 3,5-Dioxy-1-Phenyl-1,2,4-Triazol. Sm. 113—115° (Am. 30, 37 C. 1903 [2] 363).
- $C_{12}H_{11}O_6N$  11) 4-Acetylamidobenzoylbrenztraubensäure. Sm. 221,5° (B. 36, 2608 C. 1903 [2] 952).
- 12) 4-Aethoxyphtalylamidoessigsäure. Sm. 179° (B. 37, 1974 C. 1904 [2] 236).
- 13) Methylester d. 4,6[oder 4,7]-Dioxy-1-Keto-1,2-Dihydroisochinolin-6[oder 7]-Methyläther-3-Carbonsäure. Sm. 248° (B. 36, 1975 C. 1904 [2] 236).
- 14) 1-Acetat d. 4,5,6-Trioxy-2-Aethenyl-1-Oximidomethylbenzol-4,5-Methylenäther (Norcotarnonoximacetat). Sm. 130° (B. 36, 1532 C. 1903 [2] 52).
- 15) 6-Acetat d. 4,5,6-Trioxy-2-Aethenyl-1-Oximidomethylbenzol-4,5-Methylenäther. Sm. 115—116° (B. 36, 1534 C. 1903 [2] 52).
- $C_{12}H_{11}O_5N_3$  C 52,0 — H 4,0 — O 28,9 — N 15,1 — M. G. 277.
- 1) Dimethylureidoxyoxazon + H<sub>2</sub>O (A. 333, 48 C. 1904 [2] 771).
- $C_{12}H_{11}O_6N$  7) trans-1-[4-Amiphenyl]-R-Trimethylen-1<sup>2</sup>,2,3-Tricarbonsäure. Zers. bei 259° (B. 36, 3508 C. 1903 [2] 1274).
- 8) 6-Methylester d. 2-Keto-3,4-Dihydro-1,4-Benzoxazin-4-Methylcarbonsäure-6-Carbonsäure. Sm. 227° (A. 325, 334 C. 1903 [1] 771).
- $C_{12}H_{11}O_8N$  4) Triacetat d. 4-Nitro-1,2,3-Trioxybenzol. Sm. 85° (B. 37, 117 C. 1904 [1] 585).
- $C_{12}H_{11}NS$  \*2) 4-Amidodiphenylsulfid. Sm. 95° (B. 36, 114 C. 1903 [1] 454).
- $C_{12}H_{11}N_2Cl$  \*3) 5-Chlor-2,4'-Diamidobiphenyl. Sm. 169° (166—167°) (B. 36, 4089 C. 1904 [1] 269).
- 8) 4-Chlor-2-Amidodiphenylamin. Sm. 82° (A. 332, 94 C. 1904 [1] 1571).
- $C_{12}H_{12}ON_2$  \*7) 4-Amido-4'-Oxydiphenylamin (D.R.P. 139204 C. 1903 [1] 608).
- 41) 4,4'-Diamido-2-Oxybiphenyl. Sm. 226—227° (B. 36, 4113 C. 1904 [1] 272).
- 42) 3-Oxy-s-Diphenylhydrazin. Sm. 126—126,5° (B. 36, 4112 C. 1904 [1] 272).
- 43) Amid d. 2-Naphtylamidoessigsäure. Sm. 164—165° (Bl. [3] 29, 967 C. 1903 [2] 1118).
- $C_{12}H_{12}OSi$  1) Diphenylsilicon. Sm. 100—110° (B. 37, 1141 C. 1904 [1] 1257).

- $C_{12}H_{12}O_2N_2$  \*4) 4-Oxy-5-Phenylhydrazonmethyl-2-Methylfuran. Sm. 140—141° (B. 37, 303 C. 1904 [1] 648).
- \*39) Aethylester d.  $\alpha$ -Cyan- $\beta$ -Amido- $\beta$ -Phenylakrylsäure. Sm. 125° (C. r. 136, 691 C. 1903 [1] 920).
- \*51) Aethylester d. 5-Phenylpyrazol-3-Carbonsäure. Sm. 140° (B. 37, 2201 C. 1904 [2] 323).
- 52) 4,4'-Diamido-2,2'-Dioxybiphenyl (J. pr. [2] 67, 270 C. 1903 [1] 1221).
- 53) 6-Acetyl-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 278—281° (B. 36, 1174 C. 1903 [1] 1363).
- 54) Methylester d.  $\alpha$ -Cyan- $\beta$ -Methylamido- $\beta$ -Phenylakrylsäure. Sm. 128,5° (Bl. [3] 31, 342 C. 1904 [1] 1135).
- $C_{12}H_{12}O_2N_4$  7) 4-Nitro-2,4'-Diamidodiphenylamin. Sm. 188—189° (B. 37, 1072 C. 1904 [1] 1273).
- 8) 3,7,9-Triamidophenoxazoniumhydroxyd. Chlorid, Bichromat (B. 36, 483 C. 1903 [1] 652).
- 9) Amid d. Acetyl-4-Methylphenylhydrazoncyanessigsäure. Sm. oberh. 250° (J. pr. [2] 67, 408 C. 1903 [1] 1347).
- $C_{12}H_{12}O_2Br_2$  1)-[ $\alpha\beta$ -Dibrom- $\beta$ -Phenyläthyl]-R-Trimethylen-2-Carbonsäure. Sm. 203—204° (B. 37, 2105 C. 1904 [2] 104).
- 3) Methylester d.  $\gamma\delta$ -Dibrom- $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure? Sm. 126° (A. 336, 222 C. 1904 [2] 1733).
- $C_{12}H_{12}O_2Br_4$  1) Methylester d.  $\alpha\beta\gamma\delta$ -Tetrabrom- $\delta$ -Phenylvaleriansäure. Sm. 150° (A. 336, 222 C. 1904 [2] 1733).
- $C_{12}H_{12}O_2Si$  1) Diphenylsilicol. Sm. 138—139° (B. 37, 1141 C. 1904 [1] 1257).
- $C_{12}H_{12}O_3N_2$  25) Aethylester d. 5-Keto-3-Phenyl-4,5-Dihydropyrazol-1-Carbonsäure. Sm. 134° (P. GUTMANN, Dissert., Heidelberg 1903).
- 26) 3-Cyanphenylmonamid d. Bernsteinsäuremonomethylester. Sm. 88—89° (C. 1904 [2] 103).
- $C_{12}H_{12}O_3N_4$  5) 3-[4-Nitrophenylhydrazonäthyl]-5-Methylisoxazol. Sm. 235° u. Zers. (G. 34 [1] 49 C. 1904 [1] 1150).
- 6) 5-[4-Dimethylphenyl]imido-2,4,6-Triketohexahydro-1,3-Diazin (Dimethylureidindooanilin) (A. 333, 37 C. 1904 [2] 770).
- 7) 4-Acetyl-5-[ $\alpha$ -Phenylhydrazonäthyl]-1,2,3,6-Dioxdiazin. Sm. 161 bis 162° (C. 1903 [2] 1433).
- $C_{12}H_{12}O_3Br_2$  4)  $\beta$ -Dibrom- $\beta$ -Benzoylbutan- $\alpha$ -Carbonsäure. Sm. 150° (C. 1904 [1] 1258).
- 5) 4-Acetat d. 2,5-Dibrom-3,4-Dioxy-1-Propenylbenzol-3-Methyläther. Sm. 123° (A. 329, 26 C. 1903 [2] 1436).
- $C_{12}H_{12}O_3Br_4$  3) 4-Acetat d. 2,5-Dibrom-3,4-Dioxy-1-[ $\alpha\beta$ -Dibrompropyl]benzol-3-Methyläther. Sm. 117—118° (A. 329, 29 C. 1903 [2] 1436).
- $C_{12}H_{12}O_4N_2$  20)  $\alpha\beta$ -Di[2-Furanoylamido]äthan. Sm. 200° (B. 37, 2954 C. 1904 [2] 993).
- $C_{12}H_{12}O_4Cl_2$  6) Diäthylester d. 3,5-Dichlorbenzol-1,2-Dicarbonsäure. Sd. 312 bis 313<sub>760</sub> (Soc. 81, 1537 C. 1903 [1] 140).
- $C_{12}H_{12}O_4Br_2$  10)  $\alpha$ -Acetat d.  $\beta$ -Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3,4-Methylenäther. Sm. 73—74° (C. 1903 [1] 969).
- $C_{12}H_{12}O_4Br_4$  1)  $\alpha$ -Acetat d. 2,5,6-Tribrom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3-Methyläther. Sm. 156—157° (A. 329, 35 C. 1903 [2] 1437).
- $C_{12}H_{12}O_4S_2$  2)  $\beta$ -Di[Methylsulfon]naphtalin (J. pr. [2] 68, 339 C. 1903 [2] 1172).
- $C_{12}H_{12}O_5N_2$  5) Dimethylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 104—105° (Bl. [3] 31, 80 C. 1904 [1] 580).
- $C_{12}H_{12}O_6N_2$  \*7) Dilaktam d.  $\beta\gamma$ -Diimidobutan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure- $\alpha\delta$ -Diäthylester.  $Na_2 + 2H_2O$ ,  $K_2 + 2H_2O$  (A. 332, 122 C. 1904 [2] 189).
- 8)  $\alpha\alpha$ -Dimethylester d. Phenylhydrazonmethan- $\alpha\alpha$ ,2-Tricarbonsäure. Sm. 186—187° (B. 37, 4172 C. 1904 [2] 1703).
- 9)  $\alpha\alpha$ -Dimethylester d. Phenylhydrazonmethan- $\alpha\alpha$ ,3-Tricarbonsäure. Sm. 157—158° (B. 37, 4174 C. 1904 [2] 1704).
- 10)  $\alpha\alpha$ -Dimethylester d. Phenylhydrazonmethan- $\alpha\alpha$ ,4-Tricarbonsäure. Sm. 238° u. Zers. (B. 37, 4175 C. 1904 [2] 1704).
- 11) Diäthylester d.  $\beta\gamma$ -Dicyan- $\alpha\delta$ -Diketobutan- $\alpha\delta$ -Dicarbonsäure. Sm. 121—122° (Am. 30, 160 C. 1903 [2] 711).
- 12) 1,2-Phenylenester d. Acetylamidoameisensäure. Sm. 175° (B. 36, 3217 C. 1903 [2] 1056).
- $C_{12}H_{12}O_7S$  1)  $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta\delta$ -Dicarbonsäure- $\gamma$ -Sulfonsäure.  $K_2 + 2H_2O$  (Am. 31, 246 C. 1904 [1] 1080).

- $C_{12}H_{12}O_{12}B_2$  1) Gem. Anhydrid d. Bernsteinsäure u. Borsäure. Sm. 164° (*B.* 36, 2224 *C.* 1903 [2] 421).
- $C_{12}H_{12}NCl$  6) Chlor-2-Methylphenylat d. Pyridin. 2 +  $PtCl_4$  (*J. pr.* [2] 70, 44 *C.* 1904 [2] 1235).
- 7) Chlor-3-Methylphenylat d. Pyridin. +  $AuCl_3$  (*J. pr.* [2] 70, 46 *C.* 1904 [2] 1236).
- $C_{12}H_{12}NBr$  2) Brom-2-Methylphenylat d. Pyridin. +  $FeCl_3$  (*J. pr.* [2] 70, 44 *C.* 1904 [2] 1235).
- 3) Brom-3-Methylphenylat d. Pyridin. +  $FeCl_3$  (*J. pr.* [2] 70, 46 *C.* 1904 [2] 1236).
- 4) Brom-4-Methylphenylat d. Pyridin. +  $FeCl_3$  (*J. pr.* [2] 70, 47 *C.* 1904 [2] 1236).
- $C_{12}H_{13}ON$  41) 2-Methylphenylhydroxyd d. Pyridin. Salze siehe (*J. pr.* [2] 70, 44 *C.* 1904 [2] 1235).
- 42) 3-Propyl-5-Phenylisoxazol. Sm. 5—10°; Sd. 168—169°<sub>18</sub> (*C. r.* 137, 796 *C.* 1904 [1] 43).
- 43) 1-Keto-3-Isobutylpseudoisindol. Sm. 180° (*C. r.* 138, 988 *C.* 1904 [1] 1446).
- 44) 4-Methyl-2-[ $\beta$ -Oxyäthyl]chinolin. Sm. 98°.  $HCl$ , (2 $HCl$ ,  $PtCl_4$ ) (*B.* 37, 1326 *C.* 1904 [1] 1360).
- 45) Methyläther d. 6-Oxy-2,4-Dimethylchinolin + 2 $H_2O$ . Sm. 92°. (2 $HCl$ ,  $PtCl_4$ ) (*B.* 37, 1334 *C.* 1904 [1] 1361).
- 46) Amid d. 1-[ $\beta$ -Phenyläthenyl]-R-Trimethylen-2-Carbonsäure. Sm. 160° (*B.* 37, 2105 *C.* 1904 [2] 104).
- $C_{12}H_{13}ON_3$  6) 1-Acetylamido-2,4-Diamidonaphtalin. Sm. 189° (D.R.P. 151768 *C.* 1904 [2] 274).
- $C_{12}H_{13}O_2N$  49) 4-Oxy-1-Keto-3-Isopropyl-1,2-Dihydroisochinolin. Sm. 198—207° (*B.* 37, 1694 *C.* 1904 [1] 1525).
- 50) Methyläther d. 6-Oxy-2-Keto-1-Aethyl-1,2-Dihydrochinolin. Fl. (*B.* 36, 1175 *C.* 1903 [1] 1364).
- 51) Methyläther d. 4-Oxy-1-Keto-3-Aethyl-1,2-Dihydroisochinolin. Sm. 160—160,5° (*B.* 37, 1692 *C.* 1904 [1] 1525).
- 52) Aethyläther d. 6-Oxy-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 116°.  $HCl$  (*B.* 36, 1174 *C.* 1903 [1] 1363).
- $C_{12}H_{13}O_2N_3$  \*9) Aethyl ester d. 2-Methylphenylhydrazoncyanessigsäure. Sm. 134° (*J. pr.* [2] 67, 408 *C.* 1903 [1] 1347).
- 21) 4,5,4'-Triamido-2,2'-Dioxybiphenyl. 2 $HCl$  (*J. pr.* [2] 67, 272 *C.* 1903 [1] 1221).
- $C_{12}H_{13}O_2N_5$  4) 3,5,7,9-Tetraamidophenoxazoniumhydroxyd. Chlorid, Bichromat (*B.* 36, 482 *C.* 1903 [1] 651).
- $C_{12}H_{13}O_3N$  22) 1,1-Dimethyläther d. 2-Oximido-1,1-Dioxy-1,2-Dihydronaphtalin. Sm. 126° (*B.* 36, 4169 *C.* 1904 [1] 287).
- 23) Dimethyläther d. 6,7-Dioxy-1-Keto-2-Methyl-1,2-Dihydroisochinolin. Sm. 107° (109—110°).  $HCl$  + 2 $H_2O$ , Pikrat (*B.* 37, 1933 *C.* 1904 [2] 129; *B.* 37, 3401 *C.* 1904 [2] 1318).
- 24) 6[oder 7]-Aethyläther d. 4,6[oder 4,7]-Dioxy-1-Keto-3-Methyl-1,2-Dihydroisochinolin. Zers. bei 285° (*B.* 37, 1979 *C.* 1904 [2] 237).
- 25)  $\eta$ -Oximido- $\alpha$ -Phenyl- $\alpha$ -Penten- $\epsilon$ -Carbonsäure. Sm. 148—149° (*A.* 258, 132). — \*II, 987.
- 26) Aldehyd d. 6,7-Dioxy-2-Methyl-1,2,3,4-Tetrahydrochinolin-6-Methyläther-5-Carbonsäure.  $HCl$ , (2 $HCl$ ,  $PtCl_4$ ) (*B.* 36, 2214 *C.* 1903 [2] 444).
- 27) Phenylimid d.  $\alpha$ -Oxybutan- $\alpha\beta$ -Dicarbonsäure. Sm. 142—143° (*B.* 37, 2382 *C.* 1904 [2] 306).
- 28) 4-Methoxyphenylimid d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 95° (*G.* 34 [2] 267 *C.* 1904 [2] 1453).
- $C_{12}H_{13}O_3N_3$  9) Methyl ester d. 5-Oxy-1-Phenyl-1,2,3-Triazoläthyläther-4-Carbonsäure. Sm. 93—94° (*A.* 335, 78 *C.* 1904 [2] 1230).
- $C_{12}H_{13}O_3N_5$  2) Aethyl ester d. 1-Ureido-5-Phenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 208° (*B.* 36, 3615 *C.* 1903 [2] 1380).
- 3) Azid d.  $\alpha$ -Benzoylamidoacetylamidopropionsäure. Sm. 101—102° u. Zers. (*J. pr.* [2] 70, 119 *C.* 1904 [2] 1037).
- 4) Azid d.  $\alpha$ -Benzoylamidopropionylamidocoessigsäure. Sm. 84° u. Zers. (*J. pr.* [2] 70, 155 *C.* 1904 [2] 1395).

- $C_{12}H_{13}O_3Br$  1) 4-Acetat d. 5-Brom-3,4-Dioxy-1-Propenylbenzol-3-Methyläther (A. 329, 16 C. 1903 [2] 1435).
- $C_{12}H_{13}O_3Br_3$  \*2) 4-Acetat d. 5-Brom-3,4-Dioxy-1- $[\alpha\beta$ -Dibrompropyl]benzol-3-Methyläther. Sm. 130—131° (A. 329, 20 C. 1903 [2] 1435).
- $C_{12}H_{13}O_4N$  \*1)  $\gamma$ -Acetoximido- $\gamma$ -Phenylbuttersäure. Sm. 99° (M. 24, 82 C. 1903 [1] 769).
- 20) Laktone d.  $\beta$ -Nitro-1- $[\alpha$ -Oxy- $\alpha$ -Aethylpropyl]benzol-2-Carbonsäure (Nitrodiäthylphtalid). Sm. 103—104° (B. 37, 736 C. 1904 [1] 1078).
- $C_{12}H_{13}O_4Br$  8)  $\alpha$ -Acetat d.  $\alpha$ -Oxyäthyl-3-Brom-4-Oxyphenylketon-4-Methyläther. Sm. 87° (B. 37, 1548 C. 1904 [1] 1437).
- $C_{12}H_{13}O_4Br_3$  \*3) Methylenäther - Dimethyläther d. 6-Brom-2,3,4,5-Tetraoxy-1- $[\alpha\beta$ -Dibrompropyl]benzol. Sm. 120° (C. 1903 [1] 970).
- 6)  $\alpha$ -Acetat d. 2,5-Dibrom-3,4-Dioxy-1- $[\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3-Methyläther. Sm. 114—115° (A. 329, 28 C. 1903 [2] 1436).
- $C_{12}H_{13}O_5N$  \*13) 4,6,7-Trioxyl-2-Methyl-3,4-Dihydrochinolin-6-Methyläther-5-Carbonsäure. Ba + H<sub>2</sub>O (HCl, AuCl<sub>3</sub>) (B. 36, 2210 C. 1903 [2] 443).
- 15) Dimethylester d. 4-Acetylamidobenzol-1,3-Dicarbonsäure. Sm. 126° (B. 36, 1804 C. 1903 [2] 283).
- $C_{12}H_{13}O_5Br$  2) Methylenäther - Dimethyläther d. 6-Brom-2,3,4,5-Tetraoxy-1-Propionylbenzol. Sm. 128—129° (C. 1903 [1] 970).
- $C_{12}H_{13}O_5N_3$  C 48,8 — H 4,4 — O 32,5 — N 14,2 — M. G. 295.
- 1) Aethylester d. 2-Nitro-4-Acetylamidophenylloxaminsäure. Sm. 174° (B. 36, 417 C. 1903 [1] 631).
- 2) Aethylester d. 3-Nitro-4-Acetylamidophenylloxaminsäure. Sm. 179° (B. 36, 417 C. 1903 [1] 631).
- $C_{12}H_{13}O_7N$  \*6) Aethylester d. Nitroopiansäure. Sm. 96° (M. 24, 802 C. 1904 [1] 164).
- $C_{12}H_{13}O_7Br$  \*1) Diäthylester d. 5-Brom-2,4,6-Trioxylbenzol-1,3-Dicarbonsäure. Sm. 128° (Soc. 85, 167 C. 1904 [1] 163, 722).
- $C_{12}H_{14}ON_2$  \*24) 3,3-Dimethyl-2- $[\alpha$ -Oximidoäthyl]pseudoindol. Sm. 175—176° (G. 32 [2] 428 C. 1903 [1] 838).
- 33) Aethyläther d.  $\beta$ -Cyan- $\alpha$ -Imido- $\alpha$ -Oxy- $\beta$ -Phenylpropan. Sd. 158 bis 159°<sub>22-28</sub> (Am. 32, 33 C. 1904 [2] 954).
- 34) Nitril d. 2-Isovalerylamidobenzol-1-Carbonsäure. Sm. 105,5—106,5° (C. 1903 [1] 175).
- 35) Nitril d. 3-Isovalerylamidobenzol-1-Carbonsäure. Sm. 77—78° (C. 1904 [2] 101).
- $C_{12}H_{14}O_2N_2$  37) 3,5-Diketo-2,4,4-Trimethyl-1-Phenyltetrahydropyrazol. Sm. 72° (Soc. 83, 1251 C. 1903 [2] 1422).
- $C_{12}H_{14}O_2N_4$  8) Aethylester d. 1-Phenylamido-5-Methyl-1,2,3-Triazol-4-Carbonsäure. Sm. 162° (A. 325, 157 C. 1903 [1] 644).
- 9) Amid d. 5-Keto-3-Propyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol-4-Carbonsäure. Sm. 133° (B. 36, 1098 C. 1903 [1] 1140).
- $C_{12}H_{14}O_2Br_2$  6) 3-Methyläther-4-Aethyläther d.  $\alpha$ -[2,5-Dibrom-3,4-Dioxyphenyl]-propen. Sm. 79,5 (B. 37, 1131 C. 1904 [1] 1261).
- 7)  $\beta\gamma$ -Dibrom- $\alpha$ -Phenylpentan- $\epsilon$ -Carbonsäure. Sm. 103—104° u. Zers. (A. 331, 165 C. 1904 [1] 1211).
- 8) Acetat d. 2,6-Dibrom-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 54—55° (A. 333, 355 C. 1904 [2] 1116).
- $C_{12}H_{14}O_2Br_4$  1) 3-Methyläther-4-Aethyläther d. 2,5-Dibrom-3,4-Dioxy-1- $[\alpha\beta$ -Dibrompropyl]benzol. Sm. 70—71° (B. 37, 1132 C. 1904 [1] 1261).
- $C_{12}H_{14}O_8N_2$  19) Methyldi[3,5-Acetylamido]phenylketon. Sm. 210° (J. pr. [2] 69, 473 C. 1904 [2] 596).
- 20)  $\beta$ -[1-Nitroso-1,2,3,4-Tetrahydro-4-Chinoly]propionsäure. Sm. 121 bis 122° u. Zers. (B. 37, 1340 C. 1904 [1] 1363).
- 21) Aethylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Ketobuttersäure. Sm. 102—103° (C. r. 138, 1222 C. 1904 [2] 27; C. r. 139, 134 C. 1904 [2] 588).
- 22) Amid d.  $\alpha$ -Cyan- $\beta$ -[3,4-Dioxyphenyl]propion-3,4-Dimethyläthersäure. Sm. 173° (C. 1904 [2] 903).
- $C_{12}H_{14}O_8Br_2$  \*9) 4-Acetat d. 3,4-Dioxy-1- $[\alpha\beta$ -Dibrompropyl]benzol-3-Methyläther. Sm. 125—126° (A. 329, 11 C. 1903 [2] 1434).
- $C_{12}H_{14}O_4N_2$  \*15) 5-Nitro-2,4-Dimethylphenylimid d. Essigsäure. Sm. 115° (G. 33 [2] 284 C. 1904 [1] 265).
- 20)  $\alpha$ -Benzoylamidoacetylamidopropionsäure. Sm. 202°. Ag (J. pr. [2] 70, 114 C. 1904 [2] 1036).

- $C_{12}H_{14}O_4N_2$  21)  $\alpha$ -Benzoylamidopropionylamidoessigsäure. Sm. 166°. Cu, Ag (*J. pr.* [2] 70, 151 *C.* 1904 [2] 1395).
- 22) Dilakton d. Glyazintetrahydrotetramethylimalonsäure. Sm. 270 bis 275° u. Zers. (*Soc.* 83, 1262 *C.* 1903 [2] 1423).
- 23) Dimethylester d. 2-Methylphenylhydrazonmethan- $\alpha\alpha$ -Dicarbon-säure. Sm. 75–76° (*B.* 37, 4178 *C.* 1904 [2] 1704).
- 24) Dimethylester d. 3-Methylphenylhydrazonmethan- $\alpha\alpha$ -Dicarbon-säure. Sm. 63° (*B.* 37, 4178 *C.* 1904 [2] 1705).
- 25) Dimethylester d. 4-Methylphenylhydrazonmethan- $\alpha\alpha$ -Dicarbon-säure. Sm. 89–90° (*B.* 37, 4178 *C.* 1904 [2] 1705).
- 26) Aethylester d. 4-Acetylamidophenylloxaminsäure. Sm. 193° u. Zers. (*B.* 36, 414 *C.* 1903 [1] 630).
- 27) 2-Nitrophenylester d. Hexahydropyridin-1-Carbonsäure. Sm. 77°; Sd. 226–227°<sub>11</sub> u. Zers. (*Bl.* [3] 29, 753 *C.* 1903 [2] 629).
- 28) 4-Nitrophenylester d. Hexahydropyridin-1-Carbonsäure. Sm. 94–95°; Sd. 272° (*Bl.* [3] 29, 753 *C.* 1903 [2] 629).
- 29) 2-Methylphenylmonamid d. Oximidomalonsäuremonoäthylester. Sm. 140–141° (*Soc.* 83, 40 *C.* 1903 [1] 73, 442).
- $C_{12}H_{14}O_4N_4$  C 51,8 — H 5,0 — O 23,0 — N 20,1 — M. G. 278.
- 1) Dilaktam d.  $\delta\epsilon$ -Diimidooktan- $\gamma\gamma\zeta\zeta$ -Tetracarbonsäure- $\gamma\zeta$ -Diamid (*A.* 332, 128 *C.* 1904 [2] 189).
- 2)  $\alpha\alpha$ -Di[Methylamid] d. Phenylhydrazonmethan- $\alpha, \alpha, 2$ -Tricarbon-säure. Sm. 247° (*B.* 37, 4173 *C.* 1904 [2] 1703).
- 3)  $\alpha\alpha$ -Di[Methylamid] d. Phenylhydrazonmethan- $\alpha, \alpha, 3$ -Tricarbon-säure. Sm. 247–248° (*B.* 37, 4174 *C.* 1904 [2] 1704).
- 4)  $\alpha\alpha$ -Di[Methylamid] d. Phenylhydrazonmethan- $\alpha, \alpha, 4$ -Tricarbon-säure. Sm. oberh. 285° (*B.* 37, 4176 *C.* 1904 [2] 1704).
- 5) Verbindung (aus Acetyliscyansäure u. Phenylhydrazin). Sm. 184° (*B.* 36, 3217 *C.* 1903 [2] 1056).
- $C_{12}H_{14}O_4Br_2$  \*3)  $\alpha$ -Acetat d. 5-Brom-3,4-Dioxy-1- $[\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3-Methyläther. Sm. 85–86° (*A.* 329, 19 *C.* 1903 [2] 1435).
- $C_{12}H_{14}O_4S$  2) Cinnamylidenacetonyhydrosulfonsäure. K, Ba + 8H<sub>2</sub>O (*B.* 37, 4052 *C.* 1904 [2] 1649).
- $C_{12}H_{14}O_4S_2$  2) 1,3-Di[Allylsulfon]benzol. Sm. 105° (*J. pr.* [2] 68, 321 *C.* 1903 [2] 1170).
- $C_{12}H_{14}O_5N_2$  11)  $\epsilon$ -Lakton d. Glyazindihydrotetramethylimalonsäure. Sm. 214° u. Zers. Ba (*Soc.* 83, 1259 *C.* 1903 [2] 1423).
- 12)  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -[6-Nitro-3-Acetylamidophenyl]butan + 2H<sub>2</sub>O. Sm. 62° (142° wasserfrei) (*M.* 24, 9 *C.* 1903 [1] 775).
- 13)  $\beta$ -Amido- $\alpha$ -Benzoylamidoacetoxypropionsäure. Sm. 176°. NH<sub>4</sub>, Ag (*J. pr.* [2] 70, 202 *C.* 1904 [2] 1459).
- 14) Dicyanmalonesteracetylacetonlaktam. Sm. 135° (*A.* 332, 132 *C.* 1904 [2] 190).
- 15) Dimethylester d. 2-Methoxyphenylhydrazonmethan- $\alpha\alpha$ -Dicarbon-säure. Sm. 112–113° (*B.* 37, 4179 *C.* 1904 [2] 1705).
- 16) Dimethylester d. 4-Methoxyphenylhydrazonmethan- $\alpha\alpha$ -Dicarbon-säure. Sm. 91° (*B.* 37, 4179 *C.* 1904 [2] 1705).
- $C_{12}H_{14}O_5Br_2$  1) Methylenäther - Dimethyläther d. 6-Brom-2,3,4,5-Tetraoxy-1- $[\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 85–86° (*C.* 1903 [1] 970).
- $C_{12}H_{14}O_5S$  2)  $\beta$ -[4-Methylphenyl]sulfonpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 169–171° u. Zers. (*Ann.* 31, 176 *C.* 1904 [1] 876).
- $C_{12}H_{14}O_5S_2$  2) 1,3-Di[Acetonylsulfon]benzol. Sm. 150–151° (*J. pr.* [2] 68, 324 *C.* 1903 [2] 1171).
- $C_{12}H_{14}O_7N_2$  5) Gemischtes Anhydrid d. Essigsäure u.  $p$ -Dinitro-1-Isopropyl- $p$ -Dihydrobenzol-4-Carbonsäure. Sm. 72° (*M.* 25, 471 *C.* 1904 [2] 333).
- $C_{12}H_{14}O_8N_2$  2) Säure (aus d. Verb. C<sub>16</sub>H<sub>18</sub>O<sub>8</sub>N<sub>2</sub>). Sm. 158–160° (*Bl.* [3] 31, 530 *C.* 1904 [1] 1555).
- $C_{12}H_{14}O_8N_4$  2) Amylester d. 2,4,6-Trinitrophenylamidoameisensäure. Sm. 131° (*Soc.* 85, 653 *C.* 1904 [2] 311).
- $C_{12}H_{14}O_8S_2$  1) 1,3-Phenylendi[ $\alpha$ -Sulfonpropionsäure]. Ba (*J. pr.* [2] 68, 328 *C.* 1903 [2] 1171).
- 2) Dimethylester d. 1,3-Phenylendi[Sulfonsäure]. Sm. 96–97° (*J. pr.* [2] 68, 326 *C.* 1903 [2] 1171).

- $C_{12}H_{14}NJ$  \*2) Jodäthylat d. 2-Methylchinolin. Sm. 234—235° (*B.* 37, 2010 *C.* 1904 [2] 124).  
 \*3) Jodäthylat d. 4-Methylchinolin. Sm. 142° (*B.* 37, 2821 *C.* 1904 [2] 661).
- $C_{12}H_{14}N_2Cl_2$  4) Chlormethylat d. 5-Chlor-3-Methyl-1-[2-Methylphenyl]pyrazol + 2H<sub>2</sub>O. Sm. 210° (wasserfrei) (*B.* 37, 2229 *C.* 1904 [2] 228).
- $C_{12}H_{14}N_2S$  \*5) 3-Thiocarbonyl-1,4,5-Trimethyl-2-Phenyl-2,3-Dihydropyrazol. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (+ SO<sub>2</sub> + H<sub>2</sub>O) (*A.* 331, 215 *C.* 1904 [1] 1219).  
 6) 3-Thiocarbonyl-5-Methyl-1-Aethyl-2-Phenyl-2,3-Dihydropyrazol (Aethylthiopyrin). Sm. 171°. + SO<sub>2</sub> (*A.* 331, 208 *C.* 1904 [1] 1219).  
 7) Methyläther d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol. Sm. 56°; Sd. 310°. HCl, (2HCl, PtCl<sub>4</sub>) (*A.* 331, 238 *C.* 1904 [1] 1221).  
 8) Aethyläther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sd. 308 bis 310° (*A.* 331, 232 *C.* 1904 [1] 1221).
- $C_{12}H_{14}ClBr$  1)  $\alpha$ -Chlor- $\beta$ -Brom- $\alpha$ -[4-Methylphenyl]- $\gamma$ -Methyl- $\alpha$ -Buten. Sd. 130 bis 140°<sub>18</sub> (*B.* 37, 1089 *C.* 1904 [1] 1260).
- $C_{12}H_{15}ON$  \*4) 1-Benzoylhexahydropyridin. Sd. 320—321° (*B.* 36, 3524 *C.* 1903 [2] 1326).  
 \*14) Phenylamid d.  $\beta$ -Methyl- $\beta$ -Buten- $\delta$ -Carbonsäure. Sm. 106° (*C. r.* 139, 293 *C.* 1904 [2] 692).  
 \*27)  $\gamma$ -Oximido- $\alpha$ -Phenyl- $\delta$ -Methyl- $\alpha$ -Penten. Sm. 131—132° (*Soc.* 81, 1489 *C.* 1903 [1] 138).  
 34) Methyläther d. 2-Oxy-3-Isopropylpseudindol. Sm. 82° (*M.* 24, 572 *C.* 1903 [2] 887).  
 35) 2-Keto-1-Methyl-3-Isopropyl-2,3-Dihydroindol. Sm. 96° (*M.* 24, 573 *C.* 1903 [2] 887).  
 36) 4-Methylphenylamid d.  $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 110°; Sd. 230 bis 235°<sub>20</sub> (*B.* 37, 2000 *C.* 1904 [2] 24).  
 37) 4-Methylphenylamid d.  $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 81,5°; Sd. 205°<sub>18</sub> (*B.* 37, 2000 *C.* 1904 [2] 24).  
 38) 4-Methylphenylamid d.  $\beta$ -Buten- $\alpha$ -Carbonsäure. Sm. 106° (*B.* 37, 2000 *C.* 1904 [2] 24).  
 39) Amid d. 1-[ $\beta$ -Phenyläthyl]-R-Trimethylen-2-Carbonsäure. Sm. 104 bis 105° (*B.* 37, 2106 *C.* 1904 [2] 105).
- $C_{12}H_{15}OBr$  1)  $\alpha$ -Bromisobutyl-4-Methylphenylketon. Sm. 57° (*B.* 37, 1088 *C.* 1904 [1] 1260).
- $C_{12}H_{15}O_2N$  40) Methyl-4-Acetylamido-1,3-Dimethylphenylketon (aus Essigsäure-2,4-Dimethylphenylamid). Sm. 119° (D.R.P. 56971). — \*III, 121.  
 41) Aethyl-4-Propionylamidophenylketon. Sm. 153° (*C.* 1903 [1] 1223).  
 42) Methyläther d.  $\delta$ -[4-Oxyphenyl]imido- $\beta$ -Ketopentan (Acetylacetone-p-Anisidid). Sm. 49°; Sd. 195°<sub>15</sub> (*B.* 37, 1333 *C.* 1904 [1] 1361).  
 43) 3-Keto-1-Oxy-1,2-Diäthyl-2,3-Dihydroisindol. Sm. 129—130° (*B.* 37, 388 *C.* 1904 [1] 669).  
 44)  $\beta$ -[1,2,3,4-Tetrahydro-4-Chinolyl]propionsäure (*B.* 37, 1340 *C.* 1904 [1] 1362).  
 45) Methyl ester d. 8-Amido-1,2,3,4-Tetrahydronaphtalin-1-Carbonsäure. Sm. 53—54°. HCl (*B.* 35, 4223 *C.* 1903 [1] 166).  
 46) Acetylphenylamid d. Isobuttersäure. Sm. 49—50° (*C. r.* 137, 714 *C.* 1903 [2] 1428).
- $C_{12}H_{15}O_2N_3$  14)  $\gamma$ -Semicarbazon- $\alpha$ -[6-Oxy-3-Methylphenyl]- $\alpha$ -Buten. Sm. 203° (*B.* 37, 3186 *C.* 1904 [2] 991).  
 15) Diäthyläther d. 3,5-Dioxy-1-Phenyl-1,2,4-Triazol. Sm. 46—47° (53°) (*Am.* 30, 39 *C.* 1903 [2] 363; *B.* 36, 3148 *C.* 1903 [2] 1073).
- $C_{12}H_{15}O_2Br_3$  3) 3-Methyläther-4-Aethyläther d. 2-Brom-3,4-Dioxy-1-[ $\alpha$ - $\beta$ -Dibrompropyl]benzol. Fl. (*B.* 37, 1130 *C.* 1904 [1] 1261).
- $C_{12}H_{15}O_8N$  \*18) Aethyl ester d. Phenylacetylamidoessigsäure. Sm. 82° (*B.* 36, 1648 *C.* 1903 [2] 32).  
 \*20) Aethyl ester d. 2-Methylphenylmalonaminsäure. Sm. 78° (*Soc.* 83, 39 *C.* 1903 [1] 442).  
 \*21) Aethyl ester d. 4-Methylphenylmalonaminsäure. Sm. 86° (*Soc.* 83, 36 *C.* 1903 [1] 441).  
 \*42) Aethyl ester d. 4-Methylbenzoylamidoessigsäure. Sm. 71° (*B.* 36, 1648 *C.* 1903 [2] 32).

- $C_{12}H_{15}O_3N$  57) Methylenäther d. 6-Acetylamido-3,4-Dioxy-1-Propylbenzol. Sm. 171,5° (*Ar.* 242, 89 *C.* 1904 [1] 1007).  
 58) 6-Methyläther d. 6,7-Dioxy-5-Oxymethyl-2-Methyl-3,4-Dihydrochinolin. Sm. 226°. ( $HCl, AuCl_3 + 4H_2O$ ) (*B.* 36, 2214 *C.* 1903 [2] 444).  
 59) Aethylester d. 2-Acetylphenylamidoessigsäure (*B.* 32, 3234). — \*III, 96.  
 60) Aethylester d. Aethyphenyloxaminsäure. Sd. 215—220° (*Soc.* 81, 1573 *Anm. C.* 1903 [1] 158).  
 61) Phenylmonamid d. Propan- $\beta\beta$ -Dicarbonsäuremonomethylester. Sm. 80° (*Soc.* 83, 1245 *C.* 1903 [2] 1421).
- $C_{12}H_{15}O_3N_3$  11) Amid d.  $\alpha$ -Benzoylamidoacetylamidoäthylamidoameisensäure. Sm. 195° (*J. pr.* [2] 70, 120 *C.* 1904 [2] 1037).  
 12) 4-Nitrophenylamid d. Hexahydropyridin-1-Carbonsäure. Sm. 157° (*Bl.* [3] 29, 410 *C.* 1903 [1] 1363).
- $C_{12}H_{15}O_3Br$  1) 3-Methyläther-4-Aethyläther d.  $\alpha$ -Bromäthyl-3,4-Dioxyphenylketon. Sm. 79° (*B.* 37, 872 *C.* 1904 [1] 1154).
- $C_{12}H_{15}O_3Br_3$  6) 3-Methyläther-4-Aethyläther d. 2,5-Dibrom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 102—103° (*B.* 37, 1132 *C.* 1904 [1] 1261).
- $C_{12}H_{15}O_4N$  \*1) Cotarnin (Aldehyd d. 3,4,5-Trioxy-1-[ $\beta$ -Methylamidoäthyl]benzol-3-Methyläther-4,5-Methylenäther-2-Carbonsäure) (*B.* 36, 1522 *C.* 1903 [2] 49; *Soc.* 83, 598 *C.* 1903 [1] 1034, 1364; *Soc.* 85, 121 *C.* 1904 [1] 382, 732).  
 46)  $\beta$ -[4-Dimethylamido-2-Oxybenzoyl]propionsäure. Sm. 190° (*C.* 1903 [2] 1433).  
 47)  $\alpha$ -Phenylamidoformoxyl- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 126°. K (*Bl.* [3] 31, 129 *C.* 1904 [1] 644).  
 48) Diäthylester d. Phenylamin-*NN*-Dicarbonsäure. Sm. 62° (*B.* 37, 3681 *C.* 1904 [2] 1495).  
 49) 2,3-Dioxyphenylester d. Hexahydropyridin-1-Carbonsäure. Sm. 161° (*B.* 37, 109 *C.* 1904 [1] 584).  
 50) 3-Acetat d. 4-Acetylamido-1,3-Dioxybenzol-1-Aethyläther. Sm. 91—93° (*J. pr.* [2] 70, 328 *C.* 1904 [2] 1541).  
 51)  $\beta$ -Benzylamid d. 1- $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure- $\alpha$ -Methylester. Sm. 105° (*B.* 37, 2127 *C.* 1904 [2] 439).  
 52)  $\beta$ -[4-Methoxyphenylamid] d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 173° (*G.* 34 [2] 268 *C.* 1904 [2] 1454).  
 53) 4-Aethoxyphenylamid d. Acetoxylessigsäure. Sm. 130—131° (*B.* 37, 3975 *C.* 1904 [2] 1605).
- $C_{12}H_{15}O_4N_3$  10)  $\beta$ -Methyläther-3,4-Methylenäther d.  $\alpha$ -Semicarbazon- $\beta$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]propan. Sm. 181° (*A.* 332, 335 *C.* 1904 [2] 652).  
 11)  $\alpha$ -Phenylhydrazon- $\gamma$ -Amidobutan- $\alpha\gamma$ -Dicarbonsäure +  $H_2O$ . Sm. 156° u. Zers.  $K + 4H_2O$  (*B.* 23, 144 *C.* 1904 [2] 193).
- $C_{12}H_{15}O_4N_5$  2) 8-Diacetylamido-2,6-Diketo-1,3,7-Trimethylpurin. Sm. 145° (*D. R. P.* 139960 *C.* 1903 [1] 859).
- $C_{12}H_{15}O_5N$  18) 4,6,7-Trioxy-2-Methyl-1,2,3,4-Tetrahydrochinolin-6-Methyläther-5-Carbonsäure.  $HCl, (2HCl, PtCl_4)$  (*B.* 36, 2212 *C.* 1903 [2] 444).  
 19) 3-Methylester- $\alpha$ -Aethylester d. 6-Oxyphenylamidoessigsäure-3-Carbonsäure. Sm. 126° (*A.* 325, 322 *C.* 1903 [1] 770).
- $C_{12}H_{16}O_5Cl$  \*1) Lakton d. Chlortriacetylgalaktonsäure. Sm. 98° (*C.* 1903 [2] 1051).
- $C_{12}H_{16}O_5N_3$  \*1) Triäthyläther d. 2,4,6-Trinitro-1,3,5-Trioxybenzol. Sm. 119° (*Am.* 32, 173 *C.* 1904 [2] 950).
- $C_{12}H_{16}ON_2$  \*17) Phenylamid d. Hexahydropyridin-1-Carbonsäure. Sm. 168° (*Bl.* [3] 29, 410 *C.* 1903 [1] 1363).  
 25)  $\alpha$ -[d-sec. Butyl]- $\beta$ -Benzylharnstoff. Sm. 105° (*Ar.* 242, 71 *C.* 1904 [1] 999).  
 26) 5-Oxy-3,4,4-Trimethyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 118° (*B.* 36, 1275 *C.* 1903 [1] 1253).  
 27) Cyanhydrin (aus d. Nitril  $C_{11}H_{16}ON$ ). Sm. 106—108° (*C.* 1904 [1] 1082).
- $C_{12}H_{16}O_2N_2$  \*20)  $\alpha$ -Phenylhydrazon- $\beta\beta$ -Dimethylpropan- $\alpha$ -Carbonsäure. Sm. 153° (*A.* 327, 204 *C.* 1903 [1] 1407).  
 47) 4-Diacetylamido-1-Dimethylamidobenzol. Sm. 68—69° (*A.* 334, 312 *C.* 1904 [2] 986).  
 48) Phenylamidoformiat d. 1-Oxyhexahydropyridin. Sm. 105—106° (*B.* 37, 3236 *C.* 1904 [2] 1153).

- $C_{12}H_{16}O_2N_4$  4) 7-Nitro-4-Dimethylamido-2,5-Dimethylbenzimidazol. Sm. 146,5° (*J. pr.* [2] 67, 570 *C.* 1903 [2] 241).
- 5) Di[Methylamid] d. 4-Methylphenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 91° (*B.* 37, 4179 *C.* 1904 [2] 1705).
- $C_{12}H_{16}O_2Br_2$  \*1) 3-Methyläther-4-Aethyläther d. 3,4-Dioxy-1-[ $\alpha\beta$ -Dibrompropyl]-benzol (*B.* 37, 1130 *C.* 1904 [1] 1261).
- $C_{12}H_{16}O_3N_2$  39) r-Benzoylornithin (r-Monobenzoyl- $\alpha\delta$ -Diamidovaleriansäure). Sm. 228° u. Zers. (*B.* 34, 463). — \*II, 1237.
- 40)  $\alpha$ -[ $\alpha$ -Amidopropionyl]amido- $\beta$ -Phenylpropionsäure + 2H<sub>2</sub>O. Sm. 241—243° (*B.* 37, 3312 *C.* 1904 [2] 1306).
- 41) Aethylester d.  $\alpha$ -Benzoylamidoäthylamidoameisensäure. Sm. 140° (*J. pr.* [2] 70, 146 *C.* 1904 [2] 1394).
- 42) Amid d.  $\beta$ -[4-Dimethylamido-2-Oxybenzoyl]propionsäure. Sm. 217 bis 220° u. Zers. (*C.* 1903 [2] 1433).
- 43) Phenylmonohydrazid d. Propan- $\beta\beta$ -Dicarbonsäuremonomethylester. Sm. 111° (*Soc.* 83, 1250 *C.* 1903 [2] 1422).
- $C_{12}H_{16}O_3N_4$  2) Hydrazid d.  $\alpha$ -Benzoylamidoacetylamidopropionsäure. Sm. 187° (*J. pr.* [2] 70, 118 *C.* 1904 [2] 1036).
- 3) Hydrazid d.  $\alpha$ -Benzoylamidopropionylamidoessigsäure. Sm. 161 bis 162° (*J. pr.* [2] 70, 154 *C.* 1904 [2] 1395).
- $C_{12}H_{16}O_3Br_2$  \*3) 3-Methyläther- $\alpha$ -Aethyläther d. 5-Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 66—67° (*A.* 329, 17 *C.* 1903 [2] 1435).
- 4) 3-Methyläther-4-Aethyläther d. 2-Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 106—107° (*B.* 37, 1131 *C.* 1904 [1] 1261).
- $C_{12}H_{16}O_4N_2$  \*1)  $\delta\epsilon$ -Diimido- $\gamma\zeta$ -Diäthanoyl- $\beta\eta$ -Diketooktan (*A.* 332, 147 *C.* 1904 [2] 191).
- 30) Diäthylester d. 3,6-Dimethyl-1,2-Diazin-4,5-Dicarbonsäure. Sm. 22°; Sd. 275° u. Zers. + HgCl<sub>2</sub> (*B.* 36, 508 *C.* 1903 [1] 654; *B.* 36, 2538 *C.* 1903 [2] 727).
- $C_{12}H_{16}O_4N_4$  2) Methylester d.  $\beta$ -Phenylureidoacetylamidomethylamidoameisensäure. Sm. 201° u. Zers. (*J. pr.* [2] 70, 258 *C.* 1904 [2] 1464).
- $C_{12}H_{16}O_4Hg$  1) Verbindung (aus Methylchavicol). Fl. (*B.* 36, 3580 *C.* 1903 [2] 1363).
- $C_{12}H_{16}O_5N_2$  8) Methyläther d. 3,5-Dinitro-4-Oxy-1-tert. Amylbenzol. Sm. 39° (*A.* 327, 213 *C.* 1903 [1] 1408).
- $C_{12}H_{16}O_6N_2$  6) 2-Oxybenzoylhydrazon d. 1-Arabinose. Zers. 191° (*C.* 1904 [2] 1494).
- $C_{12}H_{16}O_8N_2$  \*7)  $\alpha\delta$ -Diäthylester d.  $\beta\gamma$ -Diimidobutan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure. Na<sub>2</sub> (*A.* 332, 124 *C.* 1904 [2] 189).
- $C_{12}H_{16}NJ$  \*2) Jodallylat d. 1,2,3,4-Tetrahydrochinolin. Sm. 169—170° (141°?) (*B.* 35, 3910 *C.* 1903 [1] 36).
- $C_{12}H_{16}N_2S_3$  1) Gem. Anhydrid d. Dimethylamidodithioameisensäure u. Aethylamidodithioameisensäure. Sm. 95° (*B.* 36, 2282 *C.* 1903 [2] 560).
- $C_{12}H_{17}ON$  \*17)  $\alpha$ -Cyanmethylecampher (*C. r.* 136, 789 *C.* 1903 [1] 1085).
- \*18)  $\beta$ -Cyanmethylecampher (*C. r.* 136, 789 *C.* 1903 [1] 1085).
- \*25) Diäthylamid d. Phenylessigsäure. Sd. 167—168°<sub>15</sub> (*B.* 36, 3525 *C.* 1903 [2] 1326).
- \*56) 1-Benzylhexahydropyridin-N-Oxyd. Sm. 148°. HCl, (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 37, 3232 *C.* 1904 [2] 1152).
- 61) Amid d.  $\alpha$ -Phenylpentan- $\epsilon$ -Carbonsäure. Sm. 95—96° (*B.* 37, 2106 *C.* 1904 [2] 105).
- 62) Methylphenylamid d. Isovaleriansäure. Sm. 22°; Sd. 170°<sub>50</sub> (*C. r.* 139, 300 *C.* 1904 [2] 703).
- $C_{12}H_{17}ON_3$  6) Inn. Anhydrid d. Oxymethylecamphersemicarbazon. Sm. 205 bis 207° (*A.* 329, 130 *C.* 1903 [2] 1323).
- 7) Inn. Anhydrid d. Oxymethylendihydrocarvonsemicarbazon. Sm. 125—127° (und 146—148°) (*A.* 329, 124 *C.* 1903 [2] 1323).
- 8) Inn. Anhydrid d. Oxymethylenthujonsemicarbazon. Sm. 133—134° (*A.* 329, 125 *C.* 1903 [2] 1323).
- 9) Inn. Anhydrid d. Oxymethylenisothujonsemicarbazon. Sm. 193—194° (*A.* 329, 126 *C.* 1903 [2] 1323).
- $C_{12}H_{17}O_2N$  \*48) Phenylester d. Diäthylamidoessigsäure. Fl. HCl (*A. r.* 240, 633 *C.* 1903 [1] 24).
- \*55) Phenylamidoformiat d. d- $\alpha$ -Oxy- $\beta$ -Methylbutan. Sm. 30° (*B.* 37, 1049 *C.* 1904 [1] 1249).

- $C_{12}H_{17}O_3N$  57) 2-Methylphenylester d. Diäthylamidoameisensäure. Sm. 52°; Sd. 178—179°<sub>15</sub> (Bl. [3] 31, 20 C. 1904 [1] 508).  
 58) Phenylamidoformiat d.  $\delta$ -Oxy- $\beta$ -Methylbutan. Sm. 55° (57—58°) (B. 37, 1049 C. 1904 [1] 1249; Bl. [3] 31, 600 C. 1904 [2] 19).  
 59) Benzylamid d.  $\alpha$ -Oxy- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 64° (Bl. [3] 31, 124 C. 1904 [1] 644).
- $C_{12}H_{17}O_2N_3$  10)  $\beta$ -Nitro- $\delta$ -Phenylhydrazon- $\beta$ -Methylpentan. Sm. 97° (B. 36, 658 C. 1903 [1] 763).
- $C_{12}H_{17}O_2Br_3$  1) 1-Bornylester d. Tribromessigsäure. Sm. 61° (C. r. 134, 609 C. 1902 [1] 872). — \*III, 339.
- $C_{12}H_{17}O_5N$  23) Säure (aus d. Cyanhydrin  $C_{12}H_{16}ON_3$ ) (C. 1904 [1] 1083).  
 24) Methylester d. 3-Diäthylamido-4-Oxybenzol-1-Carbonsäure. Sd. 285°. HJ (A. 325, 331 C. 1903 [1] 770).  
 25) Aethylester d. 6-Oxy-2-Methyl-5-Propylpyridin-6-Aethyläther-3-Carbonsäure. Sm. 152° (G. 33 [2] 166 C. 1903 [2] 1283).  
 26) 2-Methoxyphenylester d. Diäthylamidoameisensäure. Sd. 299—300° (Bl. [3] 31, 691 C. 1904 [2] 198).
- $C_{12}H_{17}O_5N_3$  5) Dimethyläther d.  $\beta$ -Semicarbazon- $\alpha$ -[3,4-Dioxyphenyl]propan. Sm. 176° (A. 332, 336 C. 1904 [2] 652).  
 6)  $\beta$ ,4-Dimethyläther d.  $\alpha$ -Semicarbazon- $\beta$ -Oxy- $\alpha$ -[4-Oxyphenyl]-propan. Sm. 192° (A. 332, 329 C. 1904 [2] 651).
- $C_{12}H_{17}O_3Cl$  1) Methylester d. Chlorcamphocarbonsäure. Sm. 52—53° (B. 35, 4114 C. 1903 [1] 82).  
 2) Methylester d. isom. Chlorcamphocarbonsäure. Sm. 60—61° (B. 35, 4115 C. 1903 [1] 82).
- $C_{12}H_{17}O_3Br$  3) Methylester d. o-Bromcamphocarbonsäure. Sm. 64—66° (B. 36, 1724 C. 1903 [2] 37; B. 36, 4280 Anm. C. 1904 [1] 457).
- $C_{12}H_{17}O_3J$  1) Methylester d. o-Jodecamphocarbonsäure. Sm. 71—72° (B. 36, 1725 C. 1903 [2] 37; B. 36, 4276 C. 1904 [1] 457).
- $C_{12}H_{17}O_4N$  13)  $\epsilon$ -Benzylidenamido- $\alpha\beta\delta$ -Tetraoxypentan (Benzalarabinamin). Sm. 160 bis 161° u. Zers. (C. r. 136, 1081 C. 1903 [1] 1305).
- $C_{12}H_{17}O_5N$  10) Trimethyläther d. 4-Nitro-2,3,5-Trioxy-1-Propylbenzol. Sm. 65° (B. 36, 1718 C. 1903 [2] 114).
- $C_{12}H_{17}O_5Cl$  1) Diäthylester d. 2-Chlormethyl-2,3-Dihydrofuran-4-Carbonsäure-5-Methylcarbonsäure. Sd. 198—199°<sub>17</sub> (C. r. 137, 12 C. 1903 [2] 507).
- $C_{12}H_{17}O_5N$  3)  $\epsilon$ -Aethylester d.  $\gamma$ -Cyan- $\beta$ -Methylpentan- $\beta\gamma\epsilon$ -Tricarbonsäure. K<sub>2</sub> (Soc. 85, 137 C. 1904 [1] 728).  
 4) Triäthylester d.  $\beta$ -Cyanäthan- $\alpha\alpha\beta$ -Tricarbonsäure. Sm. 45—47° (Am. 30, 468 C. 1904 [1] 378).  
 C 48,1 — H 5,7 — O 32,1 — N 14,0 — M. G. 299.
- $C_{12}H_{17}O_5N_3$  1) 4-Nitrophenylhydrazon d. Rhamnose. Sm. 186° (R. 22, 438 C. 1904 [1] 15).
- $C_{12}H_{17}O_7N_3$  C 45,7 — H 5,4 — O 35,6 — N 13,3 — M. G. 315.  
 1) 4-Nitrophenylhydrazon d. Fruktose. Sm. 176° (R. 22, 438 C. 1904 [1] 15).  
 2) 4-Nitrophenylhydrazon d. Galaktose. Sm. 192° (R. 22, 438 C. 1904 [1] 15).  
 3) 4-Nitrophenylhydrazon d. Glykose. Sm. 185° (R. 22, 436 C. 1904 [1] 15).  
 4) isom. 4-Nitrophenylhydrazon d. Glykose. Sm. 195° (R. 22, 436 C. 1904 [1] 15).  
 5) 4-Nitrophenylhydrazon d. Mannose. Sm. 190° (R. 22, 437 C. 1904 [1] 15).  
 6) isom. 4-Nitrophenylhydrazon d. Mannose. Sm. 202° (R. 22, 437 C. 1904 [1] 15).
- $C_{12}H_{17}O_5N_3$  2) Methylisoamyläther d. 3,5-Dinitro-2,2-Dioxychinolnitrosäure? Na (Am. 29, 105 C. 1903 [1] 708).
- $C_{12}H_{17}NS$  3) Phenylamid d. Thioisocaprönsäure. Sm. 63° (B. 36, 588 C. 1903 [1] 830).
- $C_{12}H_{18}ON_2$  19) Methylphenylhydrazid d. Isovaleriansäure. Sm. 61° (M. 24, 576 C. 1903 [2] 887).  
 20) Amid d.  $\alpha$ -Diäthylamidophenylessigsäure. Sm. 143—144° (B. 36, 4192 C. 1904 [1] 263).

- $C_{12}H_{18}O_2S$  4) Acetat d.  $\beta$ -Merkaptocampher. Sm.  $38^\circ$  (Soc. 83, 483 C. 1903 [1] 923, 1137).
- $C_{12}H_{18}O_3N_2$  4) Monoacetat d.  $\alpha$ -d-Campherdioxim. Sm.  $148-149^\circ$  u. Zers. (Soc. 85, 909 C. 1904 [2] 597).
- $C_{12}H_{18}O_3S$  14)  $\delta$ -Phenyl- $\beta$ -Methylpentan- $\beta$ -Sulfonsäure. Na +  $1\frac{1}{2}H_2O$ , Mg +  $3H_2O$ , Ba +  $H_2O$ , Cu +  $3H_2O$  (B. 37, 2308 C. 1904 [2] 216).  
15) d- $\alpha$ -Phenyl- $\gamma$ -Methylpentan- $\beta$ -Sulfonsäure. Ba (B. 37, 654 C. 1904 [1] 938).
- $C_{12}H_{18}O_4N_2$  \*3) Diäthylester d. 3,6-Dimethyl-4,5-Dihydro-1,2-Diazin-4,5-Dicarbon-säure. Sm.  $68-69^\circ$  (B. 35, 4311 C. 1903 [1] 335; B. 36, 500 C. 1903 [1] 653).  
\*4) Methylphenylhydrazon d. l-Arabinose. Sm.  $164^\circ$  (B. 37, 312 C. 1904 [1] 650; B. 37, 3853 C. 1904 [2] 1711).  
\*6) Phenylhydrazon d. Fukose. Sm.  $170-171^\circ$  ( $172-173^\circ$ ) (B. 37, 307 C. 1904 [1] 649; B. 37, 3859 C. 1904 [2] 1712).  
\*8) Pyrazolon (aus 5-Keto-1-Oxy-1,3-Dimethylhexahydrobenzol-3,5-Dicarbon-säurediäthylester) (A. 332, 20 C. 1904 [1] 1565).  
9) Methylphenylhydrazon d. Xylose. Sm.  $108-110^\circ$  (B. 37, 311 C. 1904 [1] 650).  
10) Äthylester d.  $\alpha$ -Cyan- $\alpha$ -Oxyessig- $[\beta$ -Cyan- $\alpha$ -Aethoxylbutyl]äther-säure. Sm.  $68^\circ$ ; Sd.  $215^\circ_{20}$  (C. 1904 [1] 159).  
11) Diäthylester d. 1-Amido-2,5-Dimethylpyrrol-3,4-Dicarbon-säure. Sm.  $102-103^\circ$  (B. 35, 4312 C. 1903 [1] 336).  
C 46,5 — H 5,8 — O 20,6 — N 27,1 — M. G. 310.
- $C_{12}H_{18}O_4N_6$  1) 2,4,2',4'-Tetraketo-3,5,5',5',5'-Hexamethyloktahydro-1,1'-Azo-imidazol. Zers. bei  $278^\circ$  (C. 1904 [2] 1029).
- $C_{12}H_{18}O_4S$  4)  $\alpha$ -[2-Oxyphenyl]butanäthyläther- $\beta$ -Sulfonsäure (B. 37, 4000 C. 1904 [2] 1641).
- $C_{12}H_{18}O_4S_2$  2)  $\alpha$ -Isoamylsulfon- $\alpha$ -Phenylsulfonmethan. Sm.  $86-88^\circ$  (B. 36, 300 C. 1903 [1] 500).  
3) 1,3-Di[Propylsulfon]benzol. Sm.  $109-110^\circ$  (J. pr. [2] 68, 321 C. 1903 [2] 1170).
- $C_{12}H_{18}O_5N_2$  14)  $\alpha$ - $[\beta\gamma\delta\epsilon$ -Tetraoxyamyl]- $\beta$ -Phenylharnstoff (Arabinaminphenylharnstoff). Sm.  $179^\circ$  (C. r. 136, 1079 C. 1903 [1] 1305).  
15) Phenylhydrazid d. Fukonsäure. Sm.  $203-204^\circ$  (B. 37, 309 C. 1904 [1] 649).  
16) Phenylhydrazid d. Rhodeonsäure. Sm.  $206^\circ$  (B. 37, 3860 C. 1904 [2] 1712).
- $C_{12}H_{18}O_6N_2$  \*11) Triäthylester d. 4,5-Dihidropyrazol-3,4,5-Tricarbon-säure. Sm.  $99^\circ$  (B. 36, 3513 C. 1903 [2] 1275).  
12) Diisobutylester d. Bisanhydronitroessigsäure. Sd.  $180-185^\circ_{15}$  (Bl. [3] 31, 681 C. 1904 [2] 195).
- $C_{12}H_{18}O_6N_4$  \*2) Azin d. Oximidoacetessigsäureäthylester (Diäthylester d. Bisdiazooacetessigsäure). Sm.  $194^\circ$  u. Zers. (G. 34 [1] 179 C. 1904 [1] 1332; B. 37, 2831 C. 1904 [2] 642).
- $C_{12}H_{18}O_6N_2$  C 45,3 — H 5,7 — O 40,2 — N 8,8 — M. G. 318.  
1) Monoäthylester d.  $\gamma$ -Amido- $\delta$ -Imidohehexan- $\beta\beta\epsilon\epsilon$ -Tetracarbonsäure. Sm.  $139-140^\circ$  u. Zers. (B. 35, 4127 C. 1903 [1] 136).
- $C_{12}H_{18}O_{10}N_{12}$  C 27,6 — H 3,8 — O 33,5 — N 35,1 — M. G. 478.  
1) Verbindung (aus Nitromalonsäureamid) (M. 25, 115 C. 1904 [1] 1553).
- $C_{12}H_{18}NCl$  \*1) Chlormethylat d. 1-Aethyl-1,2,3,4-Tetrahydrochinolin. 2 +  $PtCl_4$  (Soc. 83, 1417 C. 1904 [1] 439).  
6) d-Methyläthylallylphenylammoniumchlorid. 2 +  $PtCl_4$  (Soc. 83, 1420 C. 1904 [1] 439).  
7) Methyläthylallylphenylammoniumchlorid. 2 +  $PtCl_4$  (B. 36, 3794 C. 1904 [1] 20).
- $C_{12}H_{18}NBr$  2) Methyläthylallylphenylammoniumbromid. Zers. bei  $140^\circ$ . +  $CHCl_3$  (B. 36, 3796 C. 1904 [1] 20).
- $C_{12}H_{18}NJ$  \*7) Methyläthylallylphenylammoniumjodid. Sm.  $75-80^\circ$ . +  $CHCl_3$  (B. 36, 3793 C. 1904 [1] 20).
- $C_{12}H_{18}N_2S$  8)  $\alpha$ -[d-sec. Butyl]- $\beta$ -Benzylthioharnstoff. Sm.  $58^\circ$  (Ar. 242, 62 C. 1904 [1] 998).
- $C_{12}H_{19}ON$  \*6) Oxim d. Xyliton. Fl. (L. BLACH, Dissert., Heidelberg 1900).

- $C_{12}H_{19}ON$  \*10) Methylhydroxyd d. 1-Aethyl-1,2,3,4-Tetrahydrochinolin. d-Bromcamphersulfonat (*Soc.* 83, 1417 *C.* 1904 [1] 439).
- \*16) Aethyläther d. 6-Amido-3-Oxy-4-Isopropyl-1-Methylbenzol. *Fl.* (B. 36, 2891 *C.* 1903 [2] 875).
- 18)  $\gamma$ -Dimethylamido- $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Methylpropan. *Sd.* 144°<sub>24</sub> (*C. r.* 138, 768 *C.* 1904 [1] 1196).
- 19) Methyläthylallylphenylammoniumhydroxyd. d-Bromcamphersulfonat (*Soc.* 83, 1419 *C.* 1904 [1] 439).
- 20) 4-Oximido-6-Isobutenyl-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. *Sm.* 98° (L. BLACH, Dissert., Heidelberg 1900).
- 21) Oxim d. Isoxyliton. *Fl.* (L. BLACH, Dissert., Heidelberg 1900).
- $C_{12}H_{19}ON_3$  3)  $\delta$ -Phenylhydrazon- $\beta$ -Hydroxylamido- $\beta$ -Methylpentan. *Sm.* 120°; *Sd.* 140—150°<sub>10</sub> u. Zers. Oxalat (B. 36, 656 *C.* 1903 [1] 762).
- 4) Semicarbazon d. Santalon. *Sm.* 175° (*Ar.* 238, 373). — \*III, 415.
- 5) Inn. Anhydrid d. Oxymethylenmenthonsemicarbazon. *Sm.* 117 bis 118° (und 143—144°) (*A.* 329, 122 *C.* 1903 [2] 1322).
- 6) Inn. Anhydrid d. Oxymethylentetrahydrocarvonsemicarbazon. *Sm.* 178—182° (150°) (*A.* 329, 123 *C.* 1903 [2] 1323).
- 7) Inn. Anhydrid d. Oxymethylenthujamenthonsemicarbazon. *Sm.* 131 bis 122° (und 159—161°) (*A.* 329, 127 *C.* 1903 [2] 1323).
- $C_{12}H_{19}OBr$  2) Aethylbromcampher. *Sd.* 115—120°<sub>10</sub> (*C. r.* 138, 578 *C.* 1904 [1] 948).
- $C_{12}H_{19}OJ$  1) Verbindung (aus d-Pinen) (*G.* 33 [1] 398 *C.* 1903 [2] 571).
- $C_{12}H_{19}OJ_2$  1) Verbindung (aus d-Pinen) (*G.* 33 [1] 399 *C.* 1903 [2] 571).
- $C_{12}H_{19}OJ_3$  1) Verbindung (aus d-Pinen) (*G.* 33 [1] 397 *C.* 1903 [2] 571).
- $C_{12}H_{19}O_2N$  \*1) Aethyläther d. Oximidocampher. *Sm.* 71° (*Soc.* 85, 903 *C.* 1904 [2] 597).
- 10)  $\alpha$ -Aethyläther d.  $\gamma$ -[4-Methylphenyl]amido- $\alpha$ - $\beta$ -Dioxypropan. *Sm.* 41 bis 42° (B. 37, 3035 *C.* 1904 [2] 1213).
- 11)  $\alpha$ -Oximidoäthylcampher. *Sm.* 164° (B. 36, 2637 *C.* 1903 [2] 626).
- 12) Nitril d. 5-Acetoxy-1,1,3-Trimethylhexahydrobenzol-5-Carbonsäure. *Sd.* 146°<sub>17</sub> (D.R.P. 141699 *C.* 1903 [1] 1245).
- $C_{12}H_{19}O_2N_3$  4) Semicarbazon d. Oxymethylencampher. *Sm.* 217—218° (*A.* 329, 129 *C.* 1903 [2] 1323).
- 5) Semicarbazon d. Oxymethylendihydrocarvon. *Sm.* 163—165° (*A.* 329, 124 *C.* 1903 [2] 1323).
- 6) Semicarbazon d. Oxymethylenthujon. *Sm.* 179—181° (*A.* 329, 125 *C.* 1903 [2] 1323).
- 7) Semicarbazon d. Oxymethylenisothujon. *Sm.* 204—205° (*A.* 329, 126 *C.* 1903 [2] 1323).
- $C_{12}H_{19}O_2Cl$  \*1) l-Bornylester d. Chloressigsäure. *Sd.* 147°<sub>30</sub> (*Ar.* 240, 649 *C.* 1903 [1] 399).
- $C_{12}H_{19}O_2Cl_3$  4) Verbindung (aus l-Borneol u. Chloral). *Sm.* 48° (*C. r.* 132, 1574). — \*III, 338.
- 5) Verbindung (aus i-Borneol u. Chloral). *Sm.* 48° (*C. r.* 132, 1574). — \*III, 339.
- $C_{12}H_{19}O_2Br_3$  3) Verbindung (aus l-Borneol u. Tribromessigsäurealdehyd). *Sm.* 109° (*C. r.* 132, 1574). — \*III, 338.
- 4) Verbindung (aus i-Borneol u. Tribromessigsäurealdehyd). *Sm.* 82° (*C. r.* 132, 1574). — \*III, 339.
- $C_{12}H_{19}O_3N$  7) Trimethyläther d. Dimethyl-3,4,5-Trioxybenzylamin (N-Methylmezcalin). (2HCl, PtCl<sub>4</sub>), HJ (B. 31, 1195; 34, 3011). — \*III, 601.
- $C_{12}H_{19}O_4N$  11) Diäthylester d. cis- $\alpha$ -Cyan- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. *Sd.* 172°<sub>17</sub> (*C. r.* 136, 243 *C.* 1903 [1] 565).
- 12) Diäthylester d.  $\gamma$ -Cyan- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. *Sd.* 185°<sub>20</sub> (*Soc.* 83, 355 *C.* 1903 [1] 389, 1122).
- 13) Diäthylester d.  $\alpha$ -Cyan- $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. *Sd.* 175 bis 185°<sub>20</sub> (*C.* 1903 [2] 1425).
- $C_{12}H_{19}O_4N_3$  2) 2,5-Diketo-4,4-Dimethyl-1-Allyltetrahydroimidazol-3- $\alpha$ -Amidoisobuttersäure. *Sm.* 114° (*C.* 1904 [2] 1029).
- $C_{12}H_{19}O_4P$  1) Säure (aus Benzaldehyd). *Sm.* 192° (*C. r.* 138, 1708 *C.* 1904 [2] 423).
- 2) Säure (aus Isovaleraldehyd). *Sm.* 203—205° (*C. r.* 138, 1709 *C.* 1904 [2] 423).
- 3) Säure. *Sm.* 170° (*C. r.* 138, 1708 *C.* 1904 [2] 423).

- $C_{12}H_{19}O_6N_8$  C 50,5 — H 6,7 — O 28,1 — N 14,7 — M. G. 285.  
 1) Diäthylester d. Azodiazobisacetessigsäure. Sm. 140° u. Zers. (G. 34 [1] 209 C. 1904 [1] 1486).
- $C_{12}H_{19}O_6Cl$  2) Triäthylester d.  $\alpha$ -Chlorpropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Fl. (Soc. 85, 863 C. 1904 [2] 512).
- $C_{12}H_{19}O_6Br$  1) Triäthylester d.  $\alpha$ -Brompropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Fl. (C. 1903 [1] 628; Soc. 85, 863 C. 1904 [2] 512).
- $C_{12}H_{19}O_6J$  1) Triäthylester d.  $\alpha$ -Jodpropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Fl. (C. 1903 [1] 628; Soc. 85, 863 C. 1904 [2] 512).
- $C_{12}H_{20}OS_2$  2) Methylester d. Bornylxanthogensäure. Sm. 56–57° (C. 1904 [2] 983).  
 $C_{12}H_{20}O_8N_2$  C 60,0 — H 8,3 — O 20,0 — N 11,7 — M. G. 240.  
 1) 2,4,6-Triketo-5,5-Diisobutylhexahydro-1,3-Diazin. Sm. 173,5° (D. R. P. 146496 C. 1903 [2] 1484; A. 335, 346 C. 1904 [2] 1381).  
 2) 2,4,6-Triketo-1,3,5,5-Tetraäthylhexahydro-1,3-Diazin. Sd. 125,5 bis 126° (A. 335, 349 C. 1904 [2] 1381).  
 3) Methylhydroxyd d. Isopilocarpin. Salze siehe (C. 1897 [1] 1214; Bl. [3] 17, 563; Soc. 77, 485, 853; B. 35, 2442). — \*III, 685.
- $C_{12}H_{20}O_4N_2$  6) Azin d. Acetessigsäureäthylester. Sm. 47–48° (B. 37, 2830 C. 1904 [2] 642).
- $C_{12}H_{20}NJ$  7) Dimethylisobutylphenylammoniumjodid. Sm. 155–156° (Soc. 83, 1408 C. 1904 [1] 438).
- $C_{12}H_{20}N_2J_2$  \*3) Dijodmethylat d. i-Nikotin. Sm. 219° (B. 37, 1228 C. 1904 [1] 1278).  
 $C_{12}H_{20}N_2S_8$  1) Sulfid d. Hexahydropyridin-1-Dithiocarbonsäure. Sm. 120° (B. 36, 2281 C. 1903 [2] 560).
- $C_{12}H_{21}ON$  19) Methylidipropylphenylammoniumhydroxyd. Jodid, d-Camphersulfonat (Soc. 83, 1409 C. 1904 [1] 438).
- $C_{12}H_{21}OBr$  1) Verbindung (aus Phellandrendibromid). Sd. 125–135°<sub>10</sub> (B. 36, 1754 C. 1903 [2] 117).
- $C_{12}H_{21}O_2N$  5) Acetyllupinin. (HCl, AuCl<sub>3</sub>) (Ar. 235, 276). — \*III, 664.  
 $C_{12}H_{21}O_2N_3$  2) Semicarbazon d. Oxymethylenmenthon. Sm. 167–169° (A. 329, 121 C. 1903 [2] 1322).  
 3) Semicarbazon d. Oxymethylenthujamenthon. Sm. 125–145° (A. 329, 127 C. 1903 [2] 1323).
- $C_{12}H_{21}O_2Cl$  \*2) l-Menthylester d. Chloressigsäure. Sm. 38° (Ar. 240, 646 C. 1903 [1] 399).
- $C_{12}H_{21}O_2Br$  4) Hydrobromid d.  $\beta\zeta$ -Dimethyl- $\alpha\theta$ -Nonadien- $\iota$ -Carbonsäure. Fl. (B. 36, 2799 C. 1903 [2] 877).
- $C_{12}H_{21}O_4N$  10) Diäthylester d. r-Tropinsäure. Sd. 160°<sub>13,5</sub> (B. 33, 414). — \*III, 615.  
 $C_{12}H_{21}O_6B$  1) Gem. Anhydrid d. Buttersäure u. Borsäure. Fl. (B. 36, 2223 C. 1903 [2] 421).  
 C 46,9 — H 6,8 — O 41,7 — N 4,6 — M. G. 307.
- $C_{12}H_{21}O_6N$  1) Diisobutylester d. Nitroweinsäure. Fl. (B. 35, 4367 C. 1903 [1] 321; B. 36, 780 C. 1903 [1] 826).
- $C_{12}H_{21}O_{11}N$  \*1) Chondrosin (H. 37, 411 C. 1903 [1] 1146).  
 $C_{12}H_{21}N_2J$  2) Jodpropylat d. s-Propylphenylhydrazin (C. r. 137, 330 C. 1903 [2] 716; Bl. [3] 29, 970 C. 1903 [2] 1115).
- $C_{12}H_{22}ON_2$  \*6) Nitrolpiperidid d. 5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 152 bis 153° (B. 36, 329; A. 329, 370 C. 1904 [1] 516).  
 7) 5-Keto-3-Methyl-4-norm. Oktyl-4,5-Dihydropyrazol. Sm. 182° (Bl. [3] 31, 762 C. 1904 [2] 343).  
 8) 5-Keto-3-Methyl-4-sec. Oktyl-4,5-Dihydropyrazol. Sm. 137° (Bl. [3] 31, 762 C. 1904 [2] 343).
- $C_{12}H_{22}OS_2$  \*1) Methylester d. Menthylxanthogensäure (C. 1904 [1] 1347).  
 2) Methylester d. Thujamenthylxanthogensäure. Fl. (B. 37, 1485 C. 1904 [1] 1349).
- $C_{12}H_{22}O_2N_2$  \*3) 2,5-Diketo-3,6-Diisobutylhexahydro-1,4-Diazin. Sm. 265° (B. 37, 1182 C. 1904 [2] 1710).
- $C_{12}H_{22}O_2N_6$  C 51,1 — H 7,8 — O 11,3 — N 29,8 — M. G. 282.  
 1) 2,3-Disemicarbazon-4-Isopropyl-1-Methylhexahydrobenzol. Sm. 268 bis 270° u. Zers. (C. 1904 [2] 1044).  
 2) Semicarbazon d. Semicarbazidodihydroumbellulon. Sm. 217° u. Zers. (Soc. 85, 635 C. 1904 [1] 1607 C. 1904 [2] 333).
- $C_{12}H_{22}O_2Br_2$  1) Dihydrobromid d.  $\beta\zeta$ -Dimethyl- $\alpha\theta$ -Nonadien- $\iota$ -Carbonsäure. Fl. (B. 36, 2800 C. 1903 [2] 877).

- $C_{12}H_{22}O_2Br_4$  1) Tetrabromid d. Glykol  $C_{12}H_{22}O_2$  (*M.* 24, 158 *C.* 1903 [1] 957).  
 $C_{12}H_{22}O_3N_2$  C 59,5 — H 9,1 — O 19,8 — N 11,6 — M. G. 242.  
 1) Di[2-Oxyhexahydrophenyl]nitrosamin. Sm. 148° (*C. r.* 137, 199 *C.* 1903 [2] 665).  
 2) isom. Di[2-Oxyhexahydrophenyl]nitrosamin. Sm. 171° (*C. r.* 137, 199 *C.* 1903 [2] 665).  
 $C_{12}H_{22}O_5N_2$  C 52,6 — H 8,0 — O 29,2 — N 10,2 — M. G. 274.  
 1) Verbindung (aus Acetylen). Sd. 135–140°<sub>55</sub> (*G.* 33 [2] 321 *C.* 1904 [1] 255).  
 $C_{12}H_{23}ON$  9) l-P-Menthylamid d. Essigsäure. Sm. 136–137° (*C.* 1904 [2] 1046).  
 $C_{12}H_{23}ON_3$  C 64,0 — H 10,2 — O 7,1 — N 18,7 — M. G. 225.  
 1) Semicarbazon d. isom. l-Methylmenthon. Sm. 203–204° (*C.* 1904 [2] 1046).  
 $C_{12}H_{23}OCl$  \*1) Chlorid d. Laurinsäure. Sd. 135–140°<sub>10</sub> (*Bl.* [3] 29, 1122 *C.* 1904 [1] 259).  
 $C_{12}H_{23}O_2N$  8) Di[2-Oxyhexahydrophenyl]amin. Sm. 153°. HCl (*C. r.* 137, 199 *C.* 1903 [2] 665).  
 9) isom. Di[2-Oxyhexahydrophenyl]amin. Sm. 114°. HCl (*C. r.* 137, 199 *C.* 1903 [2] 665).  
 10) Methylester d. l-Menthylamidoameisensäure. Sm. 53° (*Soc.* 85, 689 *C.* 1904 [2] 332).  
 11) Aethylester d. 1,2,2,5,5-Pentamethyltetrahydropyrrol-3-Carbonsäure. Sd. 227°<sub>760</sub> (*B.* 36, 3361 *C.* 1903 [2] 1185).  
 $C_{12}H_{23}O_2Br$  \*1)  $\alpha$ -Bromundekan- $\alpha$ -Carbonsäure ( $\alpha$ -Laurinsäure). Sm. 32° (*Bl.* [3] 29, 1123 *C.* 1904 [1] 259).  
 $C_{12}H_{23}O_3N_3$  2) sec. Oktylester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 118–119° (*C. r.* 138, 985 *C.* 1904 [1] 1398).  
 $C_{12}H_{23}O_4N_3$  2) Aethylester d.  $\alpha$ -Amidoisocapronylamidoacetylamidoessigsäure. Fl. HCl (*B.* 36, 2991 *C.* 1903 [2] 1112).  
 $C_{12}H_{24}O_2N_4$  2)  $\gamma$ -Oximido- $\beta$ -Semicarbazon- $\delta$ -Methyldekan. Sm. 178° (*Bl.* [3] 31, 1169 *C.* 1904 [2] 1701).  
 $C_{12}H_{24}O_3N_2$  \*3) i- $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amidoisocapronsäure + 1½ H<sub>2</sub>O (i-Leucyl-leucin) (*B.* 37, 2493 *C.* 1904 [2] 425).  
 $C_{12}H_{24}O_5N_2$  C 54,1 — H 5,3 — O 30,1 — N 10,5 — M. G. 266.  
 1) d-Kaseinsäure. Sm. 226° (228°). Cu (*B.* 37, 1597 *C.* 1904 [1] 1449; *H.* 42, 290 *C.* 1904 [2] 958).  
 2) r-Kaseinsäure. Sm. 246°. Cu (*B.* 37, 1597 *C.* 1904 [1] 1449; *H.* 42, 295 *C.* 1904 [2] 958).  
 $C_{12}H_{24}O_6N_2$  C 42,3 — H 7,1 — O 42,3 — N 8,2 — M. G. 340.  
 1) Verbindung. Zers. bei 170° (*M.* 24, 451 *C.* 1903 [2] 588).  
 $C_{12}H_{24}O_{10}N_2$  1) Di[ $\beta\gamma\delta$ -Tetraoxyamylamid] d. Oxalsäure (Arabinoxamid). Sm. 217 bis 218° (*C. r.* 136, 1079 *C.* 1903 [1] 1305).  
 $C_{12}H_{25}ON$  \*1) Amid d. Laurinsäure. Sm. 98–99° (*Bl.* [3] 29, 1209 *C.* 1904 [1] 355).  
 3)  $\epsilon$ -Oximidomethyl- $\beta\zeta$ -Dimethylnonan. Sd. 153°<sub>20</sub> (*Bl.* [3] 31, 307 *C.* 1904 [1] 1133).  
 $C_{12}H_{25}ON_3$  \*1)  $\beta$ -Semicarbazonundekan. Sm. 122° (*Soc.* 81, 1588 *C.* 1903 [1] 29, 162; *Bl.* [3] 29, 676 *C.* 1903 [2] 487).  
 \*2)  $\beta$ -Semicarbazon- $\delta$ -Methyldekan. Sm. 66° (*Bl.* [3] 31, 1158 *C.* 1904 [2] 1708).  
 3)  $\alpha$ -Semicarbazonundekan. Sm. 103° (*Bl.* [3] 29, 1205 *C.* 1904 [1] 355).  
 $C_{12}H_{25}O_4N$  C 58,3 — H 10,1 — O 25,9 — N 5,7 — M. G. 247.  
 1)  $\beta$ -Diäthylamidoformiat d.  $\alpha\beta\gamma$ -Trioxypropan- $\alpha\gamma$ -Diäthyläther. Sd. 260–262° (*Bl.* [3] 31, 691 *C.* 1904 [2] 198).  
 $C_{12}H_{26}O_4S_3$  1)  $\alpha\alpha$ -Di[Isoamylsulfon]äthan. Sm. 130° (*B.* 36, 298 *C.* 1903 [1] 499).  
 $C_{12}H_{26}O_5N_2$  C 51,8 — H 9,3 — O 28,8 — N 10,1 — M. G. 278.  
 1) Diamidotrioxundekancarbonsäure. Sm. 255° u. Zers. Cu (*H.* 42, 540 *C.* 1904 [2] 1417).  
 $C_{12}H_{26}O_6S_3$  2)  $\beta\beta\epsilon$ -Triäthylsulfonhexan. Sm. 125–130° (*B.* 37, 508 *C.* 1904 [1] 883).  
 $C_{12}H_{26}NJ$  5) Jodmethylat d. Dihydro- $\beta$ -Dimethylamidocampholen. Sm. 270° u. Zers. (*C. r.* 136, 1461 *C.* 1903 [2] 287).  
 $C_{12}H_{27}ON$  3) Methylhydroxyd d. Dihydro- $\beta$ -Dimethylamidocampholen (*C. r.* 136, 1461 *C.* 1903 [2] 287).  
 $C_{12}H_{27}O_5B$  \*1) Triisobutylester d. Borsäure. Sd. 212° (*B.* 36, 2221 *C.* 1903 [2] 420).  
 $C_{12}H_{28}NCl$  1) Tetrapropylammoniumchlorid. 2 + PtCl<sub>4</sub> (*C.* 1904 [1] 923).

- $C_{12}H_{30}N_3P$  1) Tri[Isobutylamido]phosphin. Fl. (A. 326, 151 C. 1903 [1] 760).  
 2) Tri[Diäthylamido]phosphin. Sd. 245—246° u. ger. Zers. (A. 326, 169 C. 1903 [1] 762).

## — 12 IV —

- $C_{12}H_4O_5N_3Cl_3$  1) 2,3,5- oder -2,3,6-Trichlor-4-[2,4-Dinitrophenyl]imido-1-Keto-1,4-Dihydrobenzol. Sm. 211° (B. 36, 3268 C. 1903 [2] 1126; B. 37, 1727 C. 1904 [1] 1520).  
 2) 3,5,p-Trichlor-4-[2,4-Dinitrophenyl]imido-1-Keto-1,4-Dihydrobenzol. Sm. 216° (B. 36, 3265 C. 1903 [2] 1126).  
 $C_{12}H_5ONCl_4$  1) 2,3,5-Trichlor-4-[4-Chlorphenyl]imido-1-Keto-1,4-Dihydrobenzol. Sm. 153° (C. 1898 [2] 36). — \*III, 258.  
 $C_{12}H_5O_5N_3Cl_2$  1) 2,6-Diketo-4-[2,4-Dinitrophenyl]imido-1-Keto-1,4-Dihydrobenzol. Sm. 219—220° (B. 36, 3262 C. 1903 [2] 1126).  
 $C_{12}H_5O_5N_5Cl_2$  1) 2',4'-Dichlor-2,4,p,p-Tetranitrodiphenylamin. Sm. 198° (B. 36, 34 C. 1903 [1] 521).  
 $C_{12}H_5O_5N_4Br$  1) 4-Brom-2,2',4',6'-Tetranitrodiphenyläther. Sm. 232° (Am. 29, 215 C. 1903 [1] 964).  
 $C_{12}H_5O_2N_3Cl_3$  1) 2,4,6-Trichlor-2'-Nitroazobenzol. Sm. 143° (B. 36, 3820 C. 1904 [1] 18).  
 $C_{12}H_5O_3N_2S$  1) Nitroindophenin (B. 37, 3349 C. 1904 [2] 1058).  
 $C_{12}H_5O_5N_3Cl_3$  1) 2,3,5- oder -2,3,6-Trichlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 211° (B. 36, 3269 C. 1903 [2] 1126).  
 $C_{12}H_5O_5N_2Br_2$  1) 3-Brom-p-Dinitro-4,4'-Dioxybiphenyl. Zers. bei 241° (A. 333, 364 C. 1904 [2] 1117).  
 $C_{12}H_5O_5N_4S_2$  \*1) 4,4'-Bisdiazobiphenyl-2,2'-Disulfonsäure + 2H<sub>2</sub>O (J. pr. [2] 66, 572 C. 1903 [1] 519).  
 $C_{12}H_5O_5N_6S_2$  1) Diazoderivat d. 2,2'-Diamidoazobenzol-4,4'-Disulfonsäure + 2H<sub>2</sub>O (A. 330, 21 C. 1904 [1] 1139).  
 $C_{12}H_5O_7N_4Cl_2$  1) 3,5-Dichlor-2,2',4'-Trinitro-4-Oxydiphenylamin. Sm. 235° (B. 37, 1730 C. 1904 [1] 1521).  
 2) 3,5-Dichlor-2',4',6'-Trinitro-4-Oxydiphenylamin. Sm. 225° (B. 37, 1730 C. 1904 [1] 1521).  
 $C_{12}H_5O_7Br_2S$  1) p-Dibromnaphthalin-1,8-Dicarbonsäure-p-Sulfonsäure. Sm. 204 bis 205°. Ba + 8H<sub>2</sub>O (C. 1903 [2] 725).  
 $C_{12}H_5O_5N_5Cl$  1) 4'-Chlor-2',4',p,p-Tetranitrodiphenylamin. Sm. 182—183° (B. 36, 33 C. 1903 [1] 520).  
 $C_{12}H_7ONS$  \*1) Indophenin (B. 37, 2463 C. 1904 [2] 368).  
 $C_{12}H_7O_5N_3Br$  1) 3-Brom-7,8-Dioximidoacenaphten (A. 327, 88 C. 1903 [1] 1228).  
 $C_{12}H_7O_5N_2Br_3$  2) 4,5,6-Trinitro-2-Nitrodiphenylamin. Sm. 138—139° (Am. 30, 77 C. 1903 [2] 356).  
 $C_{12}H_7O_5N_3Cl_2$  2) 2,4-Dichlor-2'-Nitroazobenzol. Sm. 155,5° (B. 36, 3820 C. 1904 [1] 18).  
 $C_{12}H_7O_4NS_3$  1) Indopheninsulfonsäure. Ba (B. 37, 2464 Anm. C. 1904 [2] 368).  
 $C_{12}H_7O_4N_3Cl_2$  2) 2',4'-Dichlor-2,4-Dinitrodiphenylamin. Sm. 166° (B. 36, 33 C. 1903 [1] 521).  
 $C_{12}H_7O_5N_3Cl_2$  1) 3,5-Dichlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 207° (B. 36, 3264 C. 1903 [2] 1126).  
 $C_{12}H_7O_5N_4Cl$  \*3) 4'-Chlor-2,4,6-Trinitrodiphenylamin. Sm. 170° (J. pr. [2] 67, 469 C. 1903 [1] 1422).  
 4) 2'-Chlor-2,4,4'-Trinitrodiphenylamin. Sm. 165—166° (B. 36, 32 C. 1903 [1] 520).  
 5) 3'-Chlor-2,4,p-Trinitrodiphenylamin. Sm. 209° (?) (B. 36, 33 C. 1903 [1] 520).  
 $C_{12}H_7O_7N_4Cl$  1) 5-Chlor-2,2',4'-Trinitro-4-Oxydiphenylamin. Sm. 252° u. Zers. (B. 37, 1728 C. 1904 [1] 1520).  
 2) 5-Chlor-3,2',4'-Trinitro-4-Oxydiphenylamin. Sm. 232° (B. 37, 1729 C. 1904 [1] 1520).  
 3) 3-Chlor-2',4',6'-Trinitro-4-Oxydiphenylamin. Sm. 185,5° (B. 37, 1728 C. 1904 [1] 1520).  
 4) 2-Chlor-2',4',p-Trinitro-4-Oxydiphenylamin. Sm. 232,5° (B. 37, 1729 C. 1904 [1] 1521).

- $C_{12}H_8ON_2Cl_2$  4) 2,2'-Dichlorazoxybenzol. Sm. 56° (*J. pr.* [2] 67; 148 *C.* 1903 [1] 870).
- $C_{12}H_8ON_2Br_2$  5) Phenazin-N-Oxydibromid. Sm. 132—133°. HBr (*B.* 36, 4141 *C.* 1904 [1] 185).
- $C_{12}H_8ON_3Cl$  2) 2-[4-Chlorphenyl]-1,1-Dihydro-2,1,3-Benzotriazol-1-Oxyd. Sm. 155,5—156,5° (*B.* 36, 3826 *C.* 1904 [1] 19).
- 3) 7-Chlor-3-Amido-2-Oxy-5,10-Naphtdiazin. HCl, HNO<sub>3</sub> (*B.* 36, 4030 *C.* 1904 [1] 294).
- $C_{12}H_8ON_3Br$  1) 2-[4-Bromphenyl]-1,1-Dihydro-2,1,3-Benzotriazol-1-Oxyd. Sm. 162—162,5° (*B.* 36, 3825 *C.* 1904 [1] 18).
- 2) 7-Brom-3-Amido-2-Oxy-5,10-Naphtdiazin (*B.* 36, 4032 *C.* 1904 [1] 294).
- $C_{12}H_8O_2N_3Cl$  4) 4-Chlor-2'-Nitroazobenzol. Sm. 145—146° (*B.* 36, 3819 *C.* 1904 [1] 18).
- $C_{12}H_8O_2N_3Br$  5) 4-Brom-2'-Nitroazobenzol. Sm. 152,5° (*B.* 36, 3820 *C.* 1904 [1] 18).
- $C_{12}H_8O_4NBr$  1) Acetat d. 6-Brom-1-Nitro-2-Oxynaphtalin. Sm. 115—117° (*A.* 333, 370 *C.* 1904 [2] 1117).
- $C_{12}H_8O_4N_2S_2$  \*1) 2,2'-Dinitrodiphenyldisulfid. Sm. 195° (*J. pr.* [2] 66, 553 *C.* 1903 [1] 508).
- \*3) 4,4'-Dinitrodiphenyldisulfid. Sm. 181° (*J. pr.* [2] 66, 551 *C.* 1903 [1] 508).
- $C_{12}H_8O_4N_3Cl$  2) 2'-Chlor-2,4-Dinitrodiphenylamin. Sm. 148—149° (*B.* 36, 32 *C.* 1903 [1] 520).
- 3) 3'-Chlor-2,4-Dinitrodiphenylamin. Sm. 182—183° (*B.* 36, 33 *C.* 1903 [1] 520).
- 4) 4'-Chlor-2,4-Dinitrodiphenylamin. Sm. 165° (*B.* 36, 33 *C.* 1903 [1] 520).
- $C_{12}H_8O_4N_3Br$  4) 4-Brom-2,5-Dinitrodiphenylamin. Sm. 153—154° (*Am.* 28, 463 *C.* 1903 [1] 323).
- $C_{12}H_8O_4Cl_2S_3$  \*1) Chlorid d. Diphenylsulfid-4,4'-Disulfonsäure. Sm. 159° (*R.* 22, 351 *C.* 1904 [1] 22; *R.* 22, 357 *C.* 1904 [1] 22).
- 2) Chlorid d. Diphenylsulfid-2,2'-Disulfonsäure. Sm. 94—95° (95 bis 96°) (*R.* 22, 352 *C.* 1904 [1] 22; *R.* 22, 365 *C.* 1904 [1] 23).
- $C_{12}H_8O_6N_3Cl$  \*3) 3-Chlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 183° (*B.* 36, 3267 *C.* 1903 [2] 1126; *B.* 37, 1517 *C.* 1904 [1] 1596).
- 5) 2-Chlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 189° (*B.* 36, 3266 *C.* 1903 [2] 1126; *B.* 37, 1516 *C.* 1904 [1] 1596).
- 6) 3-Chlor-2',4'-Dinitro-4-Amidodiphenyläther. Sm. 137° (*B.* 37, 1517 *C.* 1904 [1] 1596).
- $C_{12}H_8O_6N_3Br$  1) 2-Brom-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 178—179° (*B.* 36, 3269 *C.* 1903 [2] 1126).
- $C_{12}H_8O_6Cl_2S_3$  2) Chlorid d. Diphenylsulfon-2,2'-Disulfonsäure. Sm. 147—148° (*R.* 22, 352 *C.* 1904 [1] 22; *R.* 22, 365 *C.* 1904 [1] 23).
- 3) Chlorid d. Diphenylsulfon-4,4'-Disulfonsäure. Sm. 217—220° u. Zers. (*R.* 22, 351 *C.* 1904 [1] 22; *R.* 22, 363 *C.* 1904 [1] 23).
- $C_{12}H_8O_{10}N_4S_2$  \*1) 2,2'-Dinitroazobenzol-4,4'-Disulfonsäure + 2H<sub>2</sub>O. Na<sub>2</sub> + 2H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Ag<sub>2</sub> + 2H<sub>2</sub>O (*A.* 330, 16 *C.* 1904 [1] 1140).
- $C_{12}H_8ClBr_2J$  1) Di[3-Bromphenyl]jodoniumchlorid. Sm. 207°. 2 + PtCl<sub>4</sub> (*J. pr.* [2] 69, 326 *C.* 1904 [2] 35).
- $C_{12}H_8Cl_2BrJ$  2) Di[3-Chlorphenyl]jodoniumbromid. Sm. 155° (*B.* 37, 1315 *C.* 1904 [1] 1341).
- $C_{12}H_8ONS_2$  2) 2-Thiocarbonyl-4-Keto-5-Cinnamylidentetrahydrothiazol. Sm. 208—211° u. Zers. (*M.* 23, 967 *C.* 1903 [1] 284).
- $C_{12}H_8ON_2Br$  \*2) 3-Brom-4'-Oxyazobenzol. Sm. 139—140° (*B.* 36, 3867 *C.* 1904 [1] 92).
- $C_{12}H_8ON_2J$  2) 4-Jodosoazobenzol. Sm. 105° (*B.* 37, 1312 *C.* 1904 [1] 1341).
- $C_{12}H_8OCl_2J$  2) Di[3-Chlorphenyl]jodoniumhydroxyd. Salze siehe (*B.* 37, 1315 *C.* 1904 [1] 1341).
- $C_{12}H_8OBr_2J$  1) Di[3-Bromphenyl]jodoniumhydroxyd. Salze siehe (*J. pr.* [2] 69, 326 *C.* 1904 [2] 35).
- $C_{12}H_8O_3NS$  4) 2,4-Diketo-5-Cinnamylidentetrahydrothiazol. Sm. 214—216° (*M.* 23, 971 *C.* 1903 [1] 284).

- $C_{12}H_9O_2N_2Cl$  3) 4-Chlor-2-Nitrodiphenylamin. Sm. 61° (A. 332, 93 C. 1904 [1] 1571).
- $C_{12}H_9O_2N_2J$  2) 4-Jodoazobenzol. Zers. bei 189° (B. 37, 1313 C. 1904 [1] 1341).
- $C_{12}H_9O_3NS_2$  1) 2-Thiocarbonyl-4-Keto-5-[2-Acetoxybenzyliden]tetrahydrothiazol. Sm. 168° (M. 23, 962 C. 1903 [1] 284).
- 2) 3,4-Methylenäther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Methyltetrahydrothiazol. Sm. 204° (M. 25, 172 C. 1904 [1] 895).
- $C_{12}H_9O_4NS$  5) 2,4-Diketo-5-[2-Acetoxybenzyliden]tetrahydrothiazol. Sm. 171° (M. 23, 966 C. 1903 [1] 284).
- $C_{12}H_9O_6NS$  \*1) 2-Nitro-1-Oxybenzolphenyläther-4-Sulfonsäure (D.R.P. 156156 C. 1904 [2] 1674).
- $C_{12}H_9O_7N_2S$  \*2) 2,4-Dinitrodiphenylamin-4'-Sulfonsäure (D.R.P. 152406 C. 1904 [2] 273).
- $C_{12}H_9O_8N_2S$  2) 2',4'-Dinitro-4-Oxydiphenylamin-2-Sulfonsäure (D.R.P. 143494 C. 1903 [2] 405).
- $C_{12}H_9N_2Cl_2J$  1) Azobenzol-4-Jodidchlorid. Sm. 100° u. Zers. (B. 37, 1311 C. 1904 [1] 1341).
- $C_{12}H_9ClBrJ$  1) 3-Chlordiphenyljodoniumbromid. Sm. 164° (B. 37, 1316 C. 1904 [1] 1341).
- 2) 3-Bromdiphenyljodoniumchlorid. Sm. 191°. +  $HgCl_2$ , 2 +  $PtCl_4$  (J. pr. [2] 69, 327 C. 1904 [2] 35).
- $C_{12}H_{10}ONCl$  6) Pyridin + Benzoylchlorid (C. r. 136, 1555 C. 1903 [2] 359).
- 7) 1-Naphtylchloramid d. Essigsäure. Sm. 75° (Am. 29, 308 C. 1903 [1] 1166).
- $C_{12}H_{10}ONBr_3$  8) 2-Naphtylamid d. Chloressigsäure. Sm. 117—118° (C. 1903 [2] 110).
- 1) 3,5-Dibrom-4-Oxy-1-Brommethylbenzol + Pyridin. Sm. 186 bis 190° u. Zers. (B. 36, 1884 C. 1903 [2] 291).
- $C_{12}H_{10}ONP$  2) Anhydrid d. Diphenylamidophosphinsäure +  $H_2O$ . Sm. 224° (A. 326, 222 C. 1903 [1] 866).
- $C_{12}H_{10}ON_2Br_2$  1) Azoxybenzoldibromid (B. 36, 4140 C. 1904 [1] 185).
- $C_{12}H_{10}ON_2S$  3) 2-Imido-4-Keto-5-Cinnamylidentetrahydrothiazol. Zers. bei 235° (M. 23, 971 C. 1903 [1] 284).
- $C_{12}H_{10}ON_3Cl$  1) 3,9-Diamidophenoxazoniumchlorid +  $H_2O$ . 2 +  $PtCl_4$  (B. 36, 479 C. 1903 [1] 651).
- $C_{12}H_{10}OClJ$  1) 3-Chlordiphenyljodoniumhydroxyd. Salze siehe (B. 37, 1316 C. 1904 [1] 1341).
- $C_{12}H_{10}OBrJ$  1) 3-Bromdiphenyljodoniumhydroxyd. Salze siehe (J. pr. [2] 69, 327 C. 1904 [2] 35).
- $C_{12}H_{10}O_3N_2S$  2) 2-Imido-4-Keto-5-[2-Acetoxybenzyliden]tetrahydrothiazol. Sm. 223—228° u. Zers. (M. 23, 964 C. 1903 [1] 284).
- $C_{12}H_{10}O_3N_2S_2$  2) 2-Thiocarbonyl-4-Keto-5-[3-Nitrobenzyliden]-3-Aethyltetrahydrothiazol. Sm. 188° (M. 25, 176 C. 1904 [1] 895).
- $C_{12}H_{10}O_4N_2S$  \*6) 4-Oxyazobenzol-4'-Sulfonsäure (C. 1903 [1] 325).
- \*9) Phenylamid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 126° (Soc. 85, 1187 C. 1904 [2] 1115).
- $C_{12}H_{10}O_6N_2S_2$  13) 2-Oxyazobenzol-5-Sulfonsäure. Na (B. 36, 2978 C. 1903 [2] 1031).
- \*4) Azobenzol-4,4'-Disulfonsäure.  $Na_2$ ,  $K_2$  +  $2\frac{1}{4}H_2O$  (J. pr. [2] 66, 554 C. 1903 [1] 508; A. 330, 21 C. 1904 [1] 1139).
- $C_{12}H_{10}O_7N_4S$  2) 2',4'-Dinitro-4-Amidodiphenylamin-2-oder-3-Sulfonsäure (D.R.P. 147862 C. 1904 [1] 235).
- $C_{12}H_{11}ONS$  5) 4-Amidodiphenylsulfoxyd. Sm. 152° (B. 36, 113 C. 1903 [1] 454).
- $C_{12}H_{11}ONS_2$  2) 2-Thiocarbonyl-4-Keto-5-Benzyliden-3-Aethyltetrahydrothiazol. Sm. 149° (M. 25, 174 C. 1904 [1] 895).
- $C_{12}H_{11}ON_2P$  2) Phenylimid-Phenylamid d. Phosphorsäure. Sm. 225—226° (Soc. 83, 1048 C. 1903 [2] 663).
- $C_{12}H_{11}ON_4Cl$  1) 3,7,9-Triamidophenoxazoniumchlorid (B. 36, 483 C. 1903 [1] 652).
- $C_{12}H_{11}O_2NBr_2$  6) Phenylimid d.  $\alpha\beta$ -Dibrombutan- $\alpha\beta$ -Dicarbonsäure. Sm. 164—165° (B. 37, 2383 C. 1904 [2] 306).
- $C_{12}H_{11}O_2NS$  \*3) Phenylamid d. Benzolsulfonsäure. Sm. 108,5—109° (B. 36, 2706 C. 1903 [2] 829).
- $C_{12}H_{11}O_2NS_2$  2) 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-Aethyltetrahydrothiazol. Sm. 190° (M. 25, 174 C. 1904 [1] 895).

- $C_{12}H_{11}O_2NS_2$  3) Methyläther d. 2-Thiocarbonyl-4-Keto-5-[4-Oxybenzyliden]-3-Methyltetrahydrothiazol. Sm. 181° (*M.* 25, 170 *C.* 1904 [1] 895).
- $C_{12}H_{11}O_3NS_2$  1) 5<sup>a</sup>-Methyläther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Methyltetrahydrothiazol. Sm. 199° (*M.* 25, 171 *C.* 1904 [1] 895).
- $C_{12}H_{11}O_4NS$  6) 2-Amidodiphenyläther-4-Sulfonsäure (D.R.P. 156156 *C.* 1904 [2] 1674).
- $C_{12}H_{11}O_5NS_2$  \*1) Oxyimid d. Benzolsulfonsäure (*G.* 33 [2] 310 *C.* 1904 [1] 288).
- $C_{12}H_{11}O_6N_2S$  1) 4'-Nitro-2'-Amido-4-Oxydiphenylamin-3-Sulfonsäure (D.R.P. 139679 *C.* 1903 [1] 748).
- $C_{12}H_{11}O_6N_2S_2$  \*1) Diazoamidobenzol-4,4'-Disulfonsäure. Ba (*Bl.* [3] 31, 642 *C.* 1904 [2] 96).
- 4) Diazoamidobenzol-2,2'-Disulfonsäure (*Bl.* [3] 31, 642 *C.* 1904 [2] 96).
- 5) Diazoamidobenzol-3,3'-Disulfonsäure (*Bl.* [3] 31, 642 *C.* 1904 [2] 96).
- $C_{12}H_{12}ONCl$  5) Methyläther d. 1-Chlor-4-Oxy-3-Aethylisochinolin. Sm. 55,5° (*B.* 37, 1693 *C.* 1904 [1] 1525).
- $C_{12}H_{12}ONBr$  3) 4-Methyläther d. Brom-4-Oxyphenylat d. Pyridin. +  $FeCl_3$  (*J. pr.* [2] 70, 49 *C.* 1904 [2] 1230).
- $C_{12}H_{12}ON_2Br_2$  1) 6,8-Dibrom-4-Keto-2-Isobutyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 230—231,5° (*C.* 1903 [2] 1195).
- $C_{12}H_{12}ON_2Cl$  1) 3,5,7,9-Tetraamidophenoxazoniumchlorid (*B.* 36, 481 *C.* 1903 [1] 651).
- $C_{12}H_{12}O_2NCl_3$  2) 2,4,6-Trichlorphenylester d. Hexahydropyridin-1-Carbonsäure. Sm. 75°; Sd. 227°<sub>25</sub> (*Bl.* [3] 29, 752 *C.* 1903 [2] 629).
- $C_{12}H_{12}O_2NBr$  5) Aethyläther d. 5-Brom-6-Oxy-2-Keto-1-Methyl-1,2-Dihydrochinolin. Sm. 136—137° (*B.* 36, 461 *C.* 1903 [1] 590).
- $C_{12}H_{12}O_2NBr_3$  1) 2,4,6-Tribromphenylester d. Hexahydropyridin-1-Carbonsäure. Sm. 60—61°; Sd. 218°<sub>40</sub> (*Bl.* [3] 29, 753 *C.* 1903 [2] 629).
- $C_{12}H_{12}O_2NJ$  \*1) Jodäthylat d. Chinolin-4-Carbonsäure. Sm. 200—203° (*M.* 24, 201 *C.* 1903 [2] 48).
- $C_{12}H_{12}O_2N_2S$  7) Verbindung (aus Dicyanbenzoylacetone). Sm. 182° u. Zers. (*A.* 332, 158 *C.* 1904 [2] 192).
- $C_{12}H_{12}O_3NP$  3) Phenylmonamid d. Phosphorsäuremonophenylester. Sm. 134° Ag (*A.* 326, 225 *C.* 1903 [1] 866).
- $C_{12}H_{12}O_3N_4S_3$  1) 1,3-Di[Thioureido]naphthalin-6-Sulfonsäure (D.R.P. 139429 *C.* 1903 [1] 904).
- $C_{12}H_{12}O_3ClBr_3$  1) α-Acetat d. 2,5-Dibrom-3,4-Dioxy-1-[α-Chlor-β-Brompropyl]-benzol-3-Methyläther. Sm. 97—98° (*A.* 329, 30 *C.* 1903 [2] 1436).
- $C_{12}H_{12}O_4NCl_3$  3) Diäthylester d. 2,3,5-Trichlorpyridin-4-Malonsäure. Sm. 63 bis 64°. K (*Soe.* 83, 398 *C.* 1903 [1] 840, 1141).
- $C_{12}H_{12}O_4N_2S_3$  1) Amid d. Diphenylsulfid-4,4'-Disulfonsäure. Sm. 195° (*B.* 22, 359 *C.* 1904 [1] 23).
- $C_{12}H_{12}O_6N_2S_2$  \*1) 4,4'-Diamidobiphenyl-2,2'-Disulfonsäure (*J. pr.* [2] 66, 560 *C.* 1903 [1] 518).
- \*3) s-Diphenylhydrazin-3,3'-Disulfonsäure (*J. pr.* [2] 66, 559 *C.* 1903 [1] 518).
- \*5) s-Diphenylhydrazin-4,4'-Disulfonsäure. K<sub>2</sub> (*J. pr.* [2] 66, 555 *C.* 1903 [1] 508).
- $C_{12}H_{12}O_6N_4S_2$  2) 2,2'-Diamidoazobenzol-4,4'-Disulfonsäure + 2H<sub>2</sub>O. Ag<sub>2</sub> (*A.* 330, 19 *C.* 1904 [1] 1139).
- $C_{12}H_{13}ONBr_2$  2) 8,9-Dibrom-5-Acetylamido-1,2,3,4-Tetrahydronaphthalin. Sm. 198—199° (*Soe.* 85, 746 *C.* 1904 [2] 447).
- $C_{12}H_{13}ON_2Cl_3$  1) p-Trichlorphenylamid d. Hexahydropyridin-1-Carbonsäure. Subl. bei 275—280° (*Bl.* [3] 31, 23 *C.* 1904 [1] 521).
- $C_{12}H_{13}ON_2Br_3$  1) p-Tribromphenylamid d. Hexahydropyridin-1-Carbonsäure. Subl. bei 260° (*Bl.* [3] 31, 23 *C.* 1904 [1] 521).
- $C_{12}H_{13}ON_3S$  1) 5-Merkapto-3-Keto-4-Allyl-1-Benzyltetrahydro-1,2,4-Triazol. Sm. 161° (*B.* 37, 2335 *C.* 1904 [2] 315).
- 2) 5-Merkapto-4-Allyl-1-Benzyltetrahydro-1,2,4-Triazol-3,5-Oxyd. Sm. 108° (*B.* 37, 2335 *C.* 1904 [2] 314).
- $C_{12}H_{13}O_2N_2Cl$  1) Laktone d. δ-Oxy-α-[4-Methylphenyl]hydrazon-γ-Oxyvaleriansäure. Sm. 210° (*C. r.* 137, 15 *C.* 1903 [2] 508).

- $C_{12}H_{13}O_3NS$  11) 1-Aethylamidonaphtalin-2-Sulfonsäure. Sm. 207—208°. K (*R.* 23, 185 *C.* 1904 [2] 228).
- $C_{12}H_{13}O_3N_2Br$  3) Aethyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 111° u. Zers. (*J. pr.* [2] 39, 309; [2] 45, 185). — IV, 265.
- $C_{12}H_{13}O_3ClBr_2$  1) 4-Acetat d. 5-Brom-3,4-Dioxy-1-[ $\alpha$ -Chlor- $\beta$ -Brompropyl]benzol-3-Methyläther. Sm. 111—112° (*A.* 329, 21 *C.* 1903 [2] 1435).
- $C_{12}H_{13}O_4N_2Br$  1) 4-Nitrobenzoat d.  $\beta$ -Brom- $\gamma$ -Oximido- $\beta$ -Methylbutan. Sm. 105° (*B.* 37, 540 *C.* 1904 [1] 865).
- $C_{12}H_{13}O_5N_2Br$  2) Acetylderivat d. Verb.  $C_{10}H_{11}O_4N_2Br$ . Sm. 242° (*B.* 31, 926). — \*II, 1121.
- $C_{12}H_{13}O_5ClS_2$  1) Aethylester d.  $\alpha$ -[4-Chlorphenylthiosulfon]acetessigsäure. Sm. 56—57° (*J. pr.* [2] 70, 387 *C.* 1904 [2] 1720).
- $C_{12}H_{13}O_5BrS$  1)  $\alpha\gamma$ -Sulton d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -Phenylbutan- $\gamma$ -Sulfonsäure- $\delta$ -Carbonsäuremethylester. Sm. 148° (*Ann.* 31, 255 *C.* 1904 [1] 1081).
- $C_{12}H_{13}O_5BrS_2$  1) Aethylester d.  $\alpha$ -[4-Bromphenylthiosulfon]acetessigsäure. Sm. 70—71° (*J. pr.* [2] 70, 388 *C.* 1904 [2] 1720).
- $C_{12}H_{13}O_5JS_2$  1) Aethylester d.  $\alpha$ -[4-Jodphenylthiosulfon]acetessigsäure. Sm. 90 bis 91° (*J. pr.* [2] 70, 389 *C.* 1904 [2] 1720).
- $C_{12}H_{14}ONBr$  \*5) 8-Brom-5-Aethylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 180 bis 181° (*Soc.* 85, 745 *C.* 1904 [2] 447).
- 6) 5-Brom-6-Acetylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 125,5° (*Soc.* 85, 730 *C.* 1904 [2] 116, 338).
- 7) 8-Brom-6-Acetylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 151° (*Soc.* 85, 730 *C.* 1904 [2] 116, 338).
- $C_{12}H_{14}ONJ$  6) Jodäthylat d. 6-Oxychinolin-6-Methyläther +  $H_2O$ . Sm. 179° wasserfrei (*B.* 36, 1175 *C.* 1903 [1] 1364).
- $C_{12}H_{14}ON_2Cl_2$  \*1) Verbindung (aus s-Dichlormethyläther + 2 Molec. Pyridin). +  $PtCl_4$ , +  $2AuCl_3$  (*A.* 330, 116 *C.* 1904 [1] 1063; *A.* 334, 35 *C.* 1904 [2] 948).
- $C_{12}H_{14}O_2NCl$  8) Aethyl-4-Propionylchloramidophenylketon. Sm. 80° (*C.* 1903 [1] 1223).
- $C_{12}H_{14}O_2NBr$  5) Aethyl-4-Propionylbromamidophenylketon. Sm. 120° (*C.* 1903 [1] 1223).
- 6) Brommethylester d. 6-Dimethylamido-1,2-Benzpyron. Sm. 229° (*Soc.* 85, 1237 *C.* 1904 [2] 1124).
- 7) 2-Bromphenylester d. Hexahydropyridin-1-Carbonsäure. Sm. 63° (*Bl.* [3] 29, 752 *C.* 1903 [2] 629).
- 8) 4-Bromphenylester d. Hexahydropyridin-1-Carbonsäure. Sm. 66—67°; Sd. 245°<sub>59</sub> (*Bl.* [3] 29, 753 *C.* 1903 [2] 629).
- 9) Benzoat d.  $\beta$ -Brom- $\gamma$ -Oximido- $\beta$ -Methylbutan. Sm. 70—71° (*B.* 37, 540 *C.* 1904 [1] 865).
- $C_{12}H_{14}O_2NJ$  3) Jodmethylester d. 6-Dimethylamido-1,2-Benzpyron. Sm. 202 bis 207° u. Zers. (*Soc.* 85, 1237 *C.* 1904 [2] 1124).
- $C_{12}H_{14}O_2N_2S$  1) 5-Aethylsulfon-3-Methyl-1-Phenylpyrazol. Sm. 61—62° (*A.* 331, 235 *C.* 1904 [1] 1221).
- 2) 5-Methylsulfon-3,4-Dimethyl-1-Phenylpyrazol. Sm. 137° (*A.* 331, 242 *C.* 1904 [1] 1221).
- $C_{12}H_{14}O_2N_4S$  1)  $\alpha$ -[3-Nitrobenzyliden]amido- $\alpha$ -Methyl- $\beta$ -Allylthioharnstoff. Sm. 132° (*B.* 37, 2321 *C.* 1904 [2] 311).
- 2) 1-Ureido-2-Thiocarbonyl-4-Keto-5-Dimethyl-3-Phenyltetrahydroimidazol. Sm. 191° u. Zers. (*C.* 1904 [2] 1027).
- $C_{12}H_{14}O_3NCl$  3) 4-Chlorphenylmonamid d. Propan- $\beta\beta$ -Dicarbonsäuremonomethylester. Sm. 90—91° (*Soc.* 83, 1247 *C.* 1903 [2] 1421).
- $C_{12}H_{14}O_3NBr$  7)  $\alpha$ -[ $\alpha$ -Brompropionyl]amido- $\beta$ -Phenylpropionsäure. Sm. 132—133° (*B.* 37, 3312 *C.* 1904 [2] 1306).
- $C_{12}H_{14}O_3N_2S$  2) Methylthiopyrintrioxyd. Sm. 305° u. Zers. (*A.* 331, 219 *C.* 1904 [1] 1219).
- 3) Aethylthiopyrintrioxyd. Sm. 257° u. Zers. (*A.* 331, 210 *C.* 1904 [1] 1219).
- $C_{12}H_{14}O_4NBr$  \*3) Aldehydd. 6-Brom-3,4,5-Trioxy-1-[ $\beta$ -Methylamidoäthyl]benzol-3-Methyläther-4,5-Methylenäther-2-Carbonsäure (Bromcotarnin). Sm. 135° (*B.* 36, 1534 *C.* 1903 [2] 52).

- $C_{12}H_{14}O_4Cl_4S_2$  1) 1,3-Di[ $\beta\gamma$ -Dichlorpropylsulfon]benzol (*J. pr.* [2] 68, 322 *C.* 1903 [2] 1170).
- $C_{12}H_{14}O_4Br_4S_2$  1) 1,3-Di[ $\beta\gamma$ -Dibrompropylsulfon]benzol. *Fl.* (*J. pr.* [2] 68, 323 *C.* 1903 [2] 1171).
- $C_{12}H_{14}O_6N_4S_2$  3) 2,2'-Diamido-s-Diphenylhydrazin-4,4'-Disulfonsäure.  $Na_2 + 2H_2O$  (*A.* 330, 22 *C.* 1904 [1] 1139).
- $C_{12}H_{14}O_8N_2S$  1)  $\beta$ -[5-Nitro-2-Methylphenylsulfon]amidopropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 158—159°. Ba (*H.* 43, 70 *C.* 1904 [2] 1607).
- $C_{12}H_{14}N_2ClJ$  4) Jodmethylat d. 5-Chlor-3-Methyl-1-[2-Methylphenyl]pyrazol. Sm. 231—232° (*B.* 37, 2229 *C.* 1904 [2] 228).
- $C_{12}H_{14}N_2Cl_2S$  1) Methylthiopyridindichlorid (*A.* 331, 220 *C.* 1904 [1] 1219).
- $C_{12}H_{14}N_2Cl_2Hg$  1) Verbindung (aus Quecksilberacetamid u. salzs. Anilin) (*M.* 23, 1158 *C.* 1903 [1] 385).
- $C_{12}H_{14}N_2Br_2S$  1) Methylthiopyrindibromid. Sm. 111° (*A.* 331, 221 *C.* 1904 [1] 1219).
- $C_{12}H_{15}ON_2Cl$  4) Methylhydroxyd d. 5-Chlor-3-Methyl-1-[2-Methylphenyl]pyrazol. Salze siehe (*B.* 37, 2229 *C.* 1904 [2] 228).
- 5) 3-Chlorphenylamid d. Hexahydropyridin-1-Carbonsäure. Sm. 149,5° (*Bl.* [3] 31, 22 *C.* 1904 [1] 521).
- 6) 4-Chlorphenylamid d. Hexahydropyridin-1-Carbonsäure. Sm. 173—174° (*Bl.* [3] 31, 22 *C.* 1904 [1] 521).
- $C_{12}H_{15}ON_2Br$  1) Brommethyleytisin. (2HCl, 1tCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HJ (*Ar.* 235, 384). — \*III, 654.
- 2) 3-Bromphenylamid d. Hexahydropyridin-1-Carbonsäure. Sm. 157° (*Bl.* [3] 31, 22 *C.* 1904 [1] 521).
- 3) 4-Bromphenylamid d. Hexahydropyridin-1-Carbonsäure. Sm. 188° (*Bl.* [3] 31, 23 *C.* 1904 [1] 521).
- $C_{12}H_{15}O_2N_2Br$  3) Phenylamidoformiat d.  $\beta$ -Brom- $\gamma$ -Oximido- $\beta$ -Methylbutan. Sm. 88—89° (*B.* 37, 541 *C.* 1904 [1] 865).
- $C_{12}H_{15}O_3N_2Br$  2) 4-Bromphenylmonohydrazid d. Propan- $\beta\beta$ -Dicarbonsäuremonomethylester. Sm. 96° (*Soc.* 83, 1252 *C.* 1903 [2] 1422).
- $C_{12}H_{15}O_4NS$  1) Acetyl-4-Aethoxyphenylamid d. Aethensulfonsäure. Sm. 70° (*B.* 36, 3631 *C.* 1903 [2] 1327).
- $C_{12}H_{15}O_5N_2Cl$  1) 4-Chlorbenzoylhydrazon d. l-Arabinose. Zers. bei 203° (*C.* 1904 [2] 1493).
- $C_{12}H_{15}O_5N_2Br$  4) 4-Brombenzoylhydrazon d. l-Arabinose. Zers. bei 215—216° (*C.* 1904 [2] 1493).
- 5) 4-Brombenzoylhydrazon d. d-Xylose. Zers. bei 258—260° (*C.* 1904 [2] 1493).
- $C_{12}H_{15}O_7N_2Cl$  1) Triäthyläther d. 6-Chlor-2,4-Dinitro-1,3,5-Trioxybenzol. Sm. 76° (*B.* 35, 3856 *C.* 1903 [1] 21; *Am.* 31, 377 *C.* 1904 [1] 1408).
- $C_{12}H_{15}ONCl$  3)  $\alpha$ -Chlor- $\alpha$ -Benzoylamidopentan. Sm. 66° (*B.* 37, 2916 *C.* 1904 [2] 1237).
- 4) Nitrosochlorid d.  $\delta$ -Phenyl- $\beta$ -Methyl- $\beta$ -Penten. Sm. 140° (*B.* 37, 2307 *C.* 1904 [2] 215).
- 5) Nitrosochlorid d.  $\alpha$ -Phenyl- $\gamma$ -Methyl- $\beta$ -Penten. Sm. 140—141° u. Zers. (*B.* 37, 2317 *C.* 1904 [2] 217).
- 6) Nitrosochlorid d.  $\alpha$ -Phenyl- $\beta$ -Aethyl- $\alpha$ -Buten. Sm. 99° (*B.* 37, 1724 *C.* 1904 [1] 1515).
- $C_{12}H_{16}ON_3Br$  1)  $\beta$ -Brom- $\alpha$ -Semicarbazon- $\alpha$ -[4-Methylphenyl]butan. Sm. 232° (*C. r.* 133, 1218 *C.* 1902 [1] 299). — \*III, 124.
- $C_{12}H_{16}O_4NBr$  \*1) Acetat d.  $\pi$ -Brom- $\alpha$ -Isonitrosocampher. Sm. 171° (*Soc.* 83, 967 *C.* 1903 [1] 1411 *C.* 1903 [2] 666).
- 3) Acetat d.  $\beta$ -Bromcamphoryloxim. Sm. 112° (*Soc.* 83, 967 *C.* 1903 [1] 1411 *C.* 1903 [2] 666).
- $C_{12}H_{16}O_4Br_2S_2$  1) 1,3-Di[ $\beta$ - oder  $\gamma$ -Brompropylsulfon]benzol. Sm. 74° (*J. pr.* [2] 68, 323 *C.* 1903 [2] 1171).
- $C_{12}H_{16}O_6N_4S_2$  1) 1,3-Di[ $\beta$ -Oximidopropylsulfon]benzol. Sm. 198—199° (*J. pr.* [2] 68, 325 *C.* 1903 [2] 1171).
- $C_{12}H_{17}ON_3S_2$  1) Dimethyläther d.  $\alpha$ -Dimerkaptomethylenamido- $\beta$ -Aethyl- $\alpha$ -Phenylharnstoff. Sm. 106° (*B.* 36, 1376 *C.* 1903 [1] 1344).
- $C_{12}H_{17}O_4NS$  \*3)  $r$ - $\alpha$ -Phenylsulfonamido- $\gamma$ -Methylvaleriansäure. Sm. 145—146° (*Bl.* [3] 31, 1182 *C.* 1904 [2] 1710).
- 5) Phenylsulfon-d-Isoleucin. Sm. 149—150° (*B.* 37, 1828 *C.* 1904 [1] 1645).

- $C_{12}H_{17}O_4N_2Br$  2) 4-Bromphenylhydrazon d. Rhamnose. Sm. 167° u. Zers. (*Soc.* 83, 1288 *C.* 1904 [1] 86).
- $C_{12}H_{18}O_2NCl_3$  1) Chloralcampheroxim + 2H<sub>2</sub>O. Sm. 82° u. Zers. (D.R.P. 66879; *Am.* 21, 474). — \*III, 366.
- $C_{12}H_{18}O_7N_2S$  \*1) Phenylsulfonhydrazon d. d-Glykose (*C.* 1904 [2] 1494).
- $C_{12}H_{19}O_3N_2Cl$  2) Chlormethylat d. Isopilocarpin. 2 + PtCl<sub>4</sub> (*Soc.* 77, 853). — \*III, 685.
- $C_{12}H_{19}O_3NS$  2) Methylamid d.  $\gamma$ -Oxy- $\gamma$ -Phenylpentan- $\gamma^2$ -Sulfonsäure. Sm. 111 bis 112° (*B.* 37, 3265 *C.* 1904 [2] 1031).
- $C_{12}H_{19}O_3N_3S$  1) 2-Thiocarbonyl-4-Keto-5-Dimethyl-3-Allyltetrahydroimidazol-1- $\alpha$ -Amidoisobuttersäure. Sm. 121° (*C.* 1904 [2] 1028).
- $C_{12}H_{19}O_5BrS$  1) Aethylester d. Bromdihydrocampholensulfocarbonsäure. Sm. 100—101° (*C.* 1903 [2] 38; *Soc.* 83, 1111 *C.* 1903 [2] 794).
- $C_{12}H_{20}O_3NP$  1) 2,4-Dimethylphenylmonamid d. Phosphorsäurediäthylester. Sm. 96° (*A.* 326, 240 *C.* 1903 [1] 868).
- $C_{12}H_{21}O_4N_2Br$  1) Aethylester d.  $\alpha$ -Bromisocapronylamidoacetylamidoessigsäure. Sm. 124—125° (123—124°) (*B.* 36, 2988 *C.* 1903 [2] 1112; *B.* 37, 3071 *C.* 1904 [2] 1208).
- $C_{12}H_{22}O_3NBr$  1)  $\alpha$ -[ $\alpha$ -Bromisocapronyl]amidoisocapronsäure. Sm. 188—189° (*B.* 37, 2492 *C.* 1904 [2] 424).
- $C_{12}H_{22}O_4NJ$  4) Jodmethylat d. 1-Methyltetrahydropyrrol-2,2-Dicarbonsäure. Sm. 98° (*A.* 326, 127 *C.* 1903 [1] 844).
- $C_{12}H_{25}ON_2J$  1) Jodmethylat d.  $\epsilon$ -Dimethylamido- $\beta$ - $\epsilon$ -Dimethyl- $\beta$ -Hexen- $\gamma$ -Carbonsäureamid. Sm. 184° (*B.* 36, 3363 *C.* 1903 [2] 1186).
- $C_{12}H_{25}ON_2P$  1) Aethyläther d. Di[1-Piperidyl]oxyphosphin. Sd. 152—154°<sub>27</sub> (*A.* 326, 166 *C.* 1903 [1] 762).
- $C_{12}H_{25}O_3N_2P$  1) Dipiperidid d. Phosphorsäuremonoäthylester. Sd. 176—180°<sub>20</sub> (*A.* 326, 166 *C.* 1903 [1] 762; *A.* 326, 196 *C.* 1903 [1] 820).
- $C_{12}H_{26}ONCl$  2) Chlormethylat d. 3,4,4,6-Tetramethyl-2-Isopropyltetrahydro-1,3-Oxazin. + AuCl<sub>3</sub> (*M.* 25, 858 *C.* 1904 [2] 1241).
- $C_{12}H_{28}O_2N_2J_2$  1) Di[Jodmethylat] d. Aethylenbismorpholin. Zers. bei 262° (*B.* 35, 4473 *C.* 1903 [1] 404).
- $C_{12}H_{28}N_3SP$  1) Aethylmonamid-1,1-Dipiperidid d. Thiophosphorsäure. Sm. 95° (*A.* 326, 203 *C.* 1903 [1] 821).
- $C_{12}H_{27}O_3NS$  1)  $\alpha$ -Isoamylamidoheptan- $\alpha$ -Sulfonsäure. Na (*C.* 1904 [2] 945).
- $C_{12}H_{28}O_3NP$  1) Diisobutylmonamid d. Phosphorsäurediäthylester. Fl. (*A.* 326, 186 *C.* 1903 [1] 820).
- $C_{12}H_{30}ON_3P$  1) Tri[Diäthylamid] d. Phosphorsäure. Fl. (*A.* 326, 200 *C.* 1903 [1] 821).
- 2) Tri[Isobutylamid] d. Phosphorsäure. Sm. 46—47° (*A.* 326, 177 *C.* 1903 [1] 819).
- $C_{12}H_{30}O_6N_3P_3$  1) trim. Phosphinodiäthylamin. Sm. 103° (*A.* 326, 190 *C.* 1903 [1] 820).
- $C_{12}H_{30}N_3SP$  1) Tri[Diäthylamid] d. Thiophosphorsäure. Fl. (*A.* 326, 218 *C.* 1903 [1] 822).
- 2) Tri[Isobutylamid] d. Thiophosphorsäure. Sm. 78,5° (*A.* 326, 208 *C.* 1903 [1] 821).

## — 12 V —

- $C_{12}H_4O_4N_2Cl_4S_2$  1) Di[4,5-Dichlor-2-Nitrophenyl]disulfid. Sm. 233° u. Zers. (*R.* 21, 422 *C.* 1903 [1] 504).
- $C_{12}H_6O_4N_2Br_2S_2$  2) Di[5-Brom-2-Nitrophenyl]disulfid. Sm. 184° (*R.* 21, 422 *C.* 1903 [1] 504).
- $C_{12}H_6O_6N_2Br_4S_2$  \*1) 2,4,2',4'-Tetrabromazobenzol-5,5'-Disulfonsäure. Na<sub>2</sub> + 4H<sub>2</sub>O (*A.* 330, 24 *C.* 1904 [1] 1140).
- \*2) 2,6,2',6'-Tetrabromazobenzol-4,4'-Disulfonsäure. Na<sub>2</sub> + 2H<sub>2</sub>O (*A.* 330, 38 *C.* 1904 [1] 1141).
- $C_{12}H_8O_2NCl_3S$  1) 2,4-Dichlorphenylchloramid d. Benzolsulfonsäure. Sm. 89° (*Soc.* 85, 1185 *C.* 1904 [2] 1115).
- $C_{12}H_9O_2NCl_2S$  1) 2,4-Dichlorphenylamid d. Benzolsulfonsäure. Sm. 128° (*Soc.* 85, 1185 *C.* 1904 [2] 1115).
- 2) 4-Chlorphenylchloramid d. Benzolsulfonsäure. Sm. 97° (*Soc.* 85, 1184 *C.* 1904 [2] 1115).

- $C_{12}H_9O_4N_2ClS$  2) Phenylchloramid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 106° (*Soc.* 85, 1187 *C.* 1904 [2] 1115).
- $C_{12}H_{10}O_2NClS$  \*3) 2-Chlorphenylamid d. Benzolsulfonsäure. Sm. 127° (*B.* 37, 2811 *C.* 1904 [2] 593).
- 5) Phenylchloramid d. Benzolsulfonsäure. Sm. 61° (*Soc.* 85, 1183 *C.* 1904 [2] 1115).
- $C_{12}H_{10}O_2NJS$  1) Phenylamid d. 4-Jodbenzol-1-Sulfonsäure. Sm. 143° (*A.* 332, 58 *C.* 1904 [2] 41).
- $C_{12}H_{11}O_2NClP$  1) Phenylmonamid d. Phenylphosphorsäuremonochlorid. Sm. 137° (*A.* 326, 224 *C.* 1903 [1] 866).
- $C_{12}H_{11}O_3NBrP$  1) 4-Bromphenylmonamid d. Phosphorsäuremonophenylester. Sm. 164° (*A.* 326, 232 *C.* 1903 [1] 867).
- $C_{12}H_{12}ON_2ClP$  \*1) Di[Phenylamid] d. Phosphorsäuremonochlorid. Sm. 174° (*A.* 326, 245 *C.* 1903 [1] 868).
- $C_{12}H_{12}ONBrJ$  1) Jodmethylat d. 5-Brom-6-Oxychinolinäthyläther. Sm. 215° u. Zers. (*B.* 36, 460 *C.* 1903 [1] 590).
- $C_{12}H_{13}O_2N_2BrS$  1) 5-Methylsulfon-3,4-Dimethyl-1-[4-Bromphenyl]pyrazol. Sm. 178° (*A.* 331, 243 *C.* 1904 [1] 1221).
- $C_{12}H_{14}N_2BrJS$  1) Jodmethylat d. 4-Brom-5-Merkapto-3-Methyl-1-Phenylpyrazol. Sm. 179° (*A.* 331, 230 *C.* 1904 [1] 1220).
- $C_{12}H_{15}O_2N_2JS$  1) Jodmethylat d. 5-Methylsulfon-3-Methyl-1-Phenylpyrazol. Sm. 194° (*A.* 331, 229 *C.* 1904 [1] 1220).
- $C_{12}H_{20}O_2NSP$  1) Aethylphenylmonamid d. Thiophosphorsäurediäthylester. Fl. *A.* 326, 258 *C.* 1903 [1] 869).
- $C_{12}H_{22}ON_2SP$  1) 1,1-Dipiperidid d. Thiophosphorsäuremonoäthylester. Sd. 198 bis 210°<sub>22</sub> (*A.* 326, 166 *C.* 1903 [1] 762; *A.* 326, 217 *C.* 1903 [1] 822).
- $C_{12}H_{28}O_2NSP$  1) Diamylmonamid d. Thiophosphorsäuredimethylester. Sd. 118 bis 121°<sub>18</sub> (*A.* 326, 213 *C.* 1903 [1] 822).

C<sub>13</sub>-Gruppe.

- $C_{13}H_{10}$  \*1) Fluoren. Sm. 113,5—114,5° (*B.* 36, 878 *C.* 1903 [1] 972).
- $C_{13}H_{12}$  \*1) Diphenylmethan (*J. pr.* [2] 67, 128 *C.* 1903 [1] 872; *C.* 1903 [2] 1415).
- $C_{13}H_{16}$  3) Kohlenwasserstoff (aus 1-Oxy-1-Benzylhexahydrobenzol). Sd. 138°<sub>20</sub> (*C. r.* 138, 1323 *C.* 1904 [2] 219; *C. r.* 139, 345 *C.* 1904 [2] 705).
- 4) Kohlenwasserstoff (aus 1-Oxy-1-p-Methylphenylhexahydrobenzol). Sd. 142°<sub>20</sub> (*C. r.* 138, 1323 *C.* 1904 [2] 219).
- $C_{13}H_{18}$  \*2)  $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylpropen. Sd. 235—236°<sub>745</sub> (*M.* 22, 257 *C.* 1903 [2] 243).
- 11)  $\gamma$ -Phenyl- $\beta$ -Methyl- $\beta$ -Hexen. Sd. 210—212°<sub>755</sub> (*B.* 37, 1726 *C.* 1904 [1] 1516).
- 12)  $\alpha$ -Phenyl- $\gamma$ -Methyl- $\beta$ -Hexen. Sd. 116°<sub>18</sub> (*B.* 37, 2313 *C.* 1904 [2] 216).
- 13)  $\alpha$ -[3-Methyl-6-Isopropylphenyl]propen. Sd. 226—228° (*B.* 36, 2237 *C.* 1903 [2] 438).
- 14)  $\alpha$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylpropen. Sd. 226—227°<sub>745</sub> (*B.* 37, 929 *C.* 1904 [1] 1209).
- $C_{13}H_{20}$  14) 2-Isobutyl-1,3,5-Trimethylbenzol. Sd. 228—230°<sub>745</sub> (*B.* 37, 1719 *C.* 1904 [1] 1489).
- $C_{13}H_{22}$  2) Hexahydrobenzylidenhexahydrobenzol. Sd. 133°<sub>20</sub> (*C. r.* 139, 346 *C.* 1904 [2] 705).
- $C_{13}H_{24}$  2) Di[Hexahydrophenyl]methan. Krystalle; Sd. 251,5°<sub>760</sub> (*C.* 1903 [2] 989).
- 3) 3-Isopropyl-9-Methylbicyclo-[1,3,3]-Nonan. Sd. 232—233°<sub>755</sub> (*B.* 37, 1670 *C.* 1904 [1] 1606).

## — 13 II —

- $C_{13}H_8O_5$  C 64,5 — H 2,5 — O 33,0 — M. G. 242.
- 1) Anhydrid d. Naphtalin-1,4,8-Tricarbonsäure. Sm. 243° (*A.* 327, 95 *C.* 1903 [1] 1228).
- $C_{13}H_8Cl_8$  \*1)  $\alpha\alpha, 2, 5, 2', 5'$ -Hexachlordiphenylmethan (*Am.* 30, 398 *C.* 1904 [1] 284).
- $C_{13}H_8O_2$  \*6) Xanthon (*C. r.* 136, 1007 *C.* 1903 [1] 1266).
- 14) 3-Oxy-1-Ketofluoren. Sm. 225° (*B.* 35, 4279 *C.* 1903 [1] 333).

- $C_{13}H_8O_2$  15)  $\alpha$ -Naphtocumarin (1,2- $\alpha$ -Naphtopyron). Sm. 141—142° (B. 36, 1967 C. 1903 [2] 376).
- $C_{13}H_8O_4$  9) 2,3-Dioxyxanthon. Sm. 294° (B. 37, 2736 C. 1904 [2] 542).
- $C_{13}H_8O_6$  3) Naphtalin-1,4,8-Tricarbonsäure. Ag<sub>3</sub> (A. 327, 95 C. 1903 [1] 1228).
- $C_{13}H_8Cl_4$  \*2)  $\alpha\alpha,4,4'$ -Tetrachlordiphenylmethan. Sm. 52—53°; Sd. 223°<sub>18</sub> (Am. 30, 398 C. 1904 [1] 284).
- 3)  $\alpha\alpha,2,4'$ -Tetrachlordiphenylmethan. Sd. 223°<sub>28</sub> (Am. 30, 397 C. 1904 [1] 284).
- $C_{13}H_8Br_2$  \*2)  $\beta$ -Dibromfluoren. Sm. 158° (163°) (B. 11, 170; B. 37, 3029 C. 1904 [2] 1225).
- $C_{13}H_8Cl$  1) 9-Chlorfluoren. Sm. 90° (B. 37, 2896 C. 1904 [2] 1310).
- $C_{13}H_8Br_3$  3)  $\alpha,4,4'$ -Tribromdiphenylmethan. Sm. 106—107° (Am. 30, 449 C. 1904 [1] 376).
- $C_{13}H_{10}O$  \*1) 9-Oxyfluoren. Sm. 153° (B. 37, 2895 C. 1904 [2] 1310).
- \*6) Diphenylketon. + FeCl<sub>3</sub> (R. 22, 316 C. 1903 [2] 203; Bl. [3] 29, 1131 C. 1904 [1] 284; Am. 31, 258 C. 1904 [1] 1078; B. 37, 2531 C. 1904 [2] 447).
- $C_{13}H_{10}O_2$  \*5) 4-Oxydiphenylketon. Sm. 134° (C. 1904 [2] 1697).
- \*7) 1-Phenylbenzol-2-Carbonsäure. Sm. 113,5—114,5° Cu (B. 36, 881 C. 1903 [1] 973).
- 18) 2-Benzyl-1,4-Benzochinon. Sm. 43° (B. 37, 3487 C. 1904 [2] 1301).
- $C_{13}H_{10}O_3$  \*6) 2,4'-Dioxydiphenylketon. Sm. 144° (B. 36, 3901 C. 1904 [1] 94).
- \*9) 4,4'-Dioxydiphenylketon. Sm. 208—210° (B. 36, 3899 C. 1904 [1] 94).
- \*14) 2-Oxbenzolphenyläther-1-Carbonsäure. Sm. 113° (C. r. 136, 1075 C. 1903 [1] 1362; B. 37, 854 C. 1904 [1] 1259).
- 26)  $\gamma$ -Keto- $\alpha$ -Di[2-Furanyl]- $\alpha$ - $\delta$ -Pentadien (G. 27 [2] 274). — \*III, 521.
- 27) 2,3-Dioxyxanthon. Sm. 173—175° (B. 37, 2734 C. 1904 [2] 542).
- 28) 2-Oxy-1-Phenylbenzol-3-Carbonsäure. Sm. 180° (D.R.P. 61125). — \*II, 993.
- 29) Aldehyd d. 2-Acetoxylnaphtalin-1-Carbonsäure. Sm. 87° (Bl. [3] 29, 879 C. 1903 [2] 885).
- 30) Verbindung (aus 1,2,3-Trioxybenzol u. Benzaldehyd). Sm. oberh. 300° (B. 37, 1179 C. 1904 [1] 1162).
- 31) Verbindung (aus Resorcin u. Salicylaldehyd (B. 37, 2737 C. 1904 [2] 542).
- $C_{13}H_{10}O_4$  \*12) Monobenzoat d. Maltol. Sm. 115° (B. 36, 3408 C. 1903 [2] 1281).
- \*16)  $\alpha\delta$ -Di[2-Furanyl]- $\alpha\gamma$ -Butadien- $\beta$ -Carbonsäure. Sm. 213°. Ag (Soc. 85, 191 C. 1904 [1] 644, 925).
- $C_{13}H_{10}O_5$  15) 2,3,4,3'-Tetraoxydiphenylketon. Sm. 133° (D.R.P. 49149, 50451). — \*III, 158.
- 16) 2,3,4,4'-Tetraoxydiphenylketon. Sm. noch nicht bei 200° (D.R.P. 49149, 50451). — \*III, 158.
- 17) 3,4,3',4'-Tetraoxydiphenylketon. Sm. 227—228° (D.R.P. 72446). — \*III, 158.
- $C_{13}H_{10}O_6$  13) 2,3,4,2',4'-Pentaoxydiphenylketon. Sm. 168—170° (D.R.P. 49149, 50451). — \*III, 158.
- 14) 3,4,5,2',4'-Pentaoxydiphenylketon. Sm. oberh. 200° (D.R.P. 49149, 50451). — \*III, 158.
- 15) Diacetat d. 7,8-Dioxy-1,4-Benzpyron. Sm. 110° (B. 36, 129 C. 1903 [1] 468).
- $C_{13}H_{10}O_7$  2) 2,3,4,2',3',4'-Hexaoxydiphenylketon. Sm. 238° (D.R.P. 49149, 50451). — \*III, 159.
- 3) 2,3,4,3',4',5'-Hexaoxydiphenylketon. Sm. oberh. 270° (D.R.P. 49149, 50451). — \*III, 159.
- $C_{13}H_{10}O_8$  \*1) Sordidin (A. 327, 324 C. 1903 [2] 508).
- $C_{13}H_{10}N_2$  \*8) 2-Phenylindazol. (2HCl, PtCl<sub>4</sub>), Pikrat (C. r. 136, 1137 C. 1903 [1] 1416; Bl. [3] 29, 746 C. 1903 [2] 628).
- \*10) 2-Phenylbenzimidazol. Sm. 290—292° (C. 1903 [2] 204).
- 22) Azodiphenylmethan. Sm. 76° (C. r. 136, 1137 C. 1903 [1] 1416).
- $C_{13}H_{10}Br_2$  4) 4,4'-Dibromdiphenylmethan. Sm. 64° (Am. 30, 449 C. 1904 [1] 376).
- $C_{13}H_{11}N$  \*6)  $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthen (B. 36, 119 C. 1903 [1] 469).
- 14)  $\alpha$ -Phenyl- $\alpha$ -[2-Pyridyl]äthen. Sd. 292—295° u. Zers. (2HCl, PtCl<sub>4</sub>), Pikrat (J. pr. [2] 69, 313 C. 1904 [1] 1613).
- 15)  $\alpha$ -Phenyl- $\alpha$ -[4-Pyridyl]äthen. Sd. 300—305° (J. pr. [2] 69, 318 C. 1904 [1] 1614).

- $C_{13}H_{11}N$  16) 1-Methylcarbazol. Sm. 120,5°. Pikrat (A. 332, 86 C. 1904 [1] 1569).  
 17) 3-Methylcarbazol. Sm. 203°. Pikrat (A. 332, 89 C. 1904 [1] 1569).
- $C_{13}H_{11}N_3$  13) 6-Methyl-2-Phenyl-2,1,3-Benztriazol. Sm. 98,5° (B. 36, 3827 C. 1904 [1] 19).  
 14) Diphenylmethy lazid (Benzhydrylazid). Sm. 45°? (J. pr. [2] 67, 165 C. 1903 [1] 873).
- $C_{13}H_{11}Cl$  \*1)  $\alpha$ -Chlordiphenylmethan. Sm. 14° (J. pr. [2] 67, 129 C. 1903 [1] 872).  
 $C_{13}H_{12}O$  \*1)  $\alpha$ -Oxydiphenylmethan (B. 36, 2816 C. 1903 [2] 1127; B. 36, 2823 C. 1903 [2] 1128; Soc. 85, 791 C. 1904 [2] 529).  
 \*3) 4-Oxydiphenylmethan. Sm. 84° (G. 33 [2] 456 C. 1904 [1] 654; A. 334, 373 C. 1904 [2] 1050).  
 \*6) Phenyläther d. Oxymethylbenzol. Sm. 39° (B. 36, 2063 C. 1903 [2] 357).  
 \*10) Methyläther d. 2-Oxybiphenyl. Sm. 29° (B. 36, 4080 C. 1904 [1] 268).
- $C_{13}H_{12}O_2$  25) 2,5-Dioxydiphenylmethan (Benzylhydrochinon). Sm. 105°; Sd. 230°<sub>18</sub> (B. 37, 3487 C. 1904 [2] 1301).  
 26) Methyläther d. 2-Oxydiphenyläther. Sm. 77° (Ann. 29, 128 C. 1903 [1] 705).  
 27) Methyläther d. Methyl-4-Oxy-1-Naphtylketon. Sm. 71—72°; Sd. oberh. 350° (B. 23, 1208). — III, 174; \*III, 141.  
 28) Aldehyd d. 2-Oxynaphtalinäthyläther-1-Carbonsäure. Sm. 109° (115°) (C. r. 133, 44; B. 36, 1975 C. 1903 [2] 378). — \*III, 70.
- $C_{13}H_{13}O_3$  22) 2-Oxynaphtalinäthyläther-1-Carbonsäure. Sm. 142° (C. r. 138, 618 C. 1903 [1] 881; Bl. [3] 31, 33 C. 1904 [1] 519).  
 23) Anhydrid d.  $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure- $\gamma$ -Methylcarbon-säure. Sm. 138° (B. 36, 2330 C. 1903 [2] 438).  
 24) Methylester d. 2-Oxynaphtalinmethyläther-1-Carbonsäure. Sm. 52° (B. 37, 3661 C. 1904 [2] 1453).  
 25) Methylester d. 3-Oxynaphtalinmethyläther-2-Carbonsäure. Sm. 49° (B. 37, 3661 C. 1904 [2] 1453).
- $C_{13}H_{12}O_4$  26) Methylbenzoat d. 1,4-Pyron. Sm. 98,5—99° (B. 37, 3749 C. 1904 [2] 1539).
- $C_{13}H_{12}O_5$  9) Methylderivat d. Verb.  $C_{13}H_{10}O_5$ . Sm. 135° (M. 22, 589). — \*III, 310.  
 $C_{13}H_{12}O_6$  \*2) Formaldehydphloroglucid (Methylenbisphloroglucin). Sm. 225° u. Zers. (A. 329, 269 C. 1904 [1] 795).  
 9) Di[ $\beta$ -Trioxyphenyl]methan (aus 1,2,4-Trioxybenzol). Sm. 227—230° (B. 37, 1176 C. 1904 [1] 1161).  
 10) 1,3,5-Trimethylbenzol-2,4-Di[Ketocarbonsäure] + 2H<sub>2</sub>O. Sm. 100°. K, Ba. — \*II, 1174.  
 11) 1-Phenyl-R-Tetramethylen-2,3,4-Tricarbonsäure. Sm. 184° (B. 37, 2275 C. 1904 [2] 217).  
 12) Dilakton d.  $\beta\alpha$ -Dioxy- $\delta\delta$ -Diketo- $\beta\eta$ -Undekadien- $\beta\eta$ -Dicarbonsäure (Methylenbistriacetsäurelakton). Sm. 245° u. Zers. (B. 37, 3391 C. 1904 [2] 1221).
- $C_{13}H_{12}O_7$  9) Aldehyd d. 2,4,6-Triacetoxylbenzol-1-Carbonsäure. Sm. 122—123° (M. 24, 865 C. 1904 [1] 368).
- $C_{13}H_{12}N_2$  \*1) Diphenylformamidin. Dibenzoat (B. 37, 3116 C. 1904 [2] 1316).  
 \*7) stab.  $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazin. Sm. 158—160° (C. 1903 [2] 1432).  
 \*22) 1,2-Dimethyl- $\beta$ -Naphtimidazol. Pikrat (Soc. 83, 1197 C. 1903 [2] 1445).  
 23) 2,N-Dimethyl- $\alpha$ - oder - $\beta$ -Naphtimidazol. Fl. Pikrat (Soc. 83, 1193 C. 1903 [2] 1444).  
 24) Nitril d.  $\alpha$ -[1-Naphtyl]amidopropionsäure. Sm. 104—105° (D. R. P. 144536 C. 1903 [2] 779).
- $C_{13}H_{12}J_2$  3) Phenyl-3-Methylphenyljodoniumjodid. Sm. 165° (A. 327, 276 C. 1903 [2] 350).
- $C_{13}H_{13}N$  \*4)  $\alpha$ -Amidodiphenylmethan (B. 36, 704 C. 1903 [1] 818).  
 \*8) Methyldiphenylamin. Sd. 291° (A. 327, 113 C. 1903 [1] 1213).  
 21)  $\alpha$ -Phenyl- $\beta$ -[4-Pyridyl]äthan. Sm. 69—71°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 37, 2148 C. 1904 [2] 235).
- $C_{13}H_{13}N_3$  \*3) Phenylimido- $\beta$ -Phenylhydrazidomethan. Sm. 109—109,5° (B. 36, 2481 C. 1903 [2] 559).

- $C_{13}H_{13}N_3$  \*4)  $\alpha$ -Phenyl- $\beta$ -[2-Amidobenzyliden]hydrazin (B. 36, 4184 C. 1904 [1] 279).  
 24)  $\alpha$ -Phenylhydrazon- $\alpha$ -Amido- $\alpha$ -Phenylmethan. HCl +  $\frac{1}{2}H_2O$  (B. 36, 2484 C. 1903 [2] 490).  
 25) 4-Phenylazo-2,6-Dimethylpyridin. Sm. 62—63°. (2HCl,  $PtCl_4$ ),  $H_2Cr_2O_7$ , Pikrat (B. 36, 1119 C. 1903 [1] 1185).
- $C_{13}H_{14}O_2$  10) 7-Oxy-4-Methylen-2,3,5-Trimethyl-1,4-Benzpyran. HCl +  $H_2O$ , Pikrat (B. 37, 1795 C. 1904 [1] 1612).
- $C_{13}H_{14}O_4$  \*7) Aethylester d. Benzoylacetessigsäure. Cu (B. 37, 3395 C. 1904 [2] 1221).  
 30)  $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure- $\gamma$ -Methylcarbonsäure (Cinnamylglutarsäure). Sm. 135° (B. 36, 2339 C. 1903 [2] 438).  
 31) Dimethylester d.  $\alpha$ -Phenylpropen- $\beta\gamma$ -Dicarbonsäure. Sd. 186° (M. 24, 369 C. 1903 [2] 496).
- $C_{13}H_{14}O_5$  \*4)  $\alpha$ -Keto- $\alpha$ -Phenylpentan- $\gamma\gamma$ -Dicarbonsäure. 2 +  $CHCl_3$  (C. 1904 [1] 1259).  
 11)  $\beta$ -Benzoylbutan- $\alpha\alpha$ -Dicarbonsäure. Sm. 140° u. Zers. (C. 1904 [1] 1258).  
 12) Monoacetat d. 3,5-Dioxy-2,4-Diacetyl-1-Methylbenzol. Sm. 75° (Soc. 85, 978 C. 1904 [2] 454, 711).  
 13) Verbindung (aus Harnstoff u. d. Verb.  $C_{11}H_8O_4$ ). Zers. bei 200° (Soc. 83, 189 C. 1903 [1] 670).
- $C_{13}H_{14}O_6$  27) Laktone d. 1-Benzylidengulonsäure. Sm. 174° (R. 19, 180). — \*III, 7.  
 28) Diacetat d. Methyl-2,3,4-Trioxypheylketonmonomethyläther. Sm. 146—148° (Soc. 83, 132 C. 1903 [1] 89, 466).
- $C_{13}H_{14}O_7$  10) 2,3,5-Triacetat d. 1,2,3,5-Tetraoxybenzol-1-Methyläther. Zers. bei 103—105° (M. 23, 956 C. 1903 [1] 286).
- $C_{13}H_{14}N_2$  \*17) uns-Phenylbenzylhydrazin. Sd. 216—218°<sub>ss</sub> (M. 25, 599 C. 1904 [2] 1294).  
 36) Diphenylmethylhydrazin (Benzhydrylhydrazin). Sm. 58—59°; Sd. 188°<sub>ss</sub>. HCl,  $HNO_3$ ,  $HNO_2$ , Pikrat, Oxalat (J. pr. [2] 67, 125 C. 1903 [1] 872).  
 37) 3-Methyl-6-[ $\beta$ -Phenyläthenyl]-2,5-Dihydro-1,4-Diazin. Sd. 151°<sub>10</sub>. 2HCl, (2HCl,  $PtCl_4$ ) (M. 25, 1075 C. 1904 [2] 1659).
- $C_{13}H_{15}N$  17) 2-(oder 4)-Methyl-1,2,3,4-Tetrahydrocarbazol. Sm. 98—99°. Pikrat (C. 1904 [2] 343).
- $C_{13}H_{15}N_3$  6) 4-Phenylhydrazido-2,6-Dimethylpyridin. Sm. 172—180°. HCl, (2HCl,  $PtCl_4$ ) (B. 36, 1118 C. 1903 [1] 1185).
- $C_{13}H_{16}O$  \*4) Benzoylhexahydrobenzol. Sm. 51° (C. r. 139, 345 C. 1904 [2] 705).  
 6) 2,2-Diäthyl-1,2-Benzpyran. Sd. 126—127°<sub>15</sub> (B. 37, 495 C. 1904 [1] 805).
- $C_{13}H_{16}O_2$  \*9)  $\alpha$ -[4-Isopropylphenyl]propen- $\beta$ -Carbonsäure. Sm. 90—91° (A. 330, 264 C. 1904 [1] 947).  
 \*15) Diäthyläther d.  $\gamma\gamma$ -Dioxy- $\alpha$ -Phenylpropin. Sd. 144—145°<sub>14</sub> (C. r. 138, 1340 C. 1904 [2] 187).  
 22) Aethyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Penten. Sd. 167—170°<sub>18</sub> (C. r. 139, 209 C. 1904 [2] 649).  
 23) Isobutylester d.  $\beta$ -Phenylakrylsäure. Sd. 164—165°<sub>16-17</sub> (Soc. 83, 673 C. 1903 [2] 115).  
 24) Acetat d.  $\gamma$ -[2-Oxyphenyl]- $\beta$ -Penten. Sd. 132—134°<sub>33</sub> (Bl. [3] 29, 353 C. 1903 [1] 1222).  
 25) Benzoat d.  $\beta$ -Oxy- $\alpha$ -oder- $\beta$ -Hexen. Sd. 170—175°<sub>50</sub> (Soc. 83, 151 C. 1903 [1] 72, 436).
- $C_{13}H_{16}O_3$  28)  $\beta$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Butenäthyläther- $\alpha$ -Carbonsäure. Sm. 92°. Cu (B. 36, 2248 C. 1903 [2] 436).  
 29) isom.  $\beta$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Butenäthyläther- $\alpha$ -Carbonsäure. Sm. 108°. Cu (B. 36, 2248 C. 1903 [2] 436).  
 30) isom.  $\beta$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Butenäthyläther- $\alpha$ -Carbonsäure. Sm. 92—93°. Cu (B. 36, 2248 C. 1903 [2] 436).  
 31)  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Butenäthyläther- $\alpha$ -Carbonsäure +  $H_2O$ . Sm. 86—87°. Cu (B. 36, 2246 C. 1903 [2] 435).  
 32) Methylester d.  $\alpha$ -[2-Aethoxyphenyl]propen- $\gamma$ -Carbonsäure. Fl. (B. 37, 3988 C. 1904 [2] 1639).  
 33) Methylester d.  $\alpha$ -[3-Aethoxyphenyl]propen- $\gamma$ -Carbonsäure. Sd. 175 bis 176°<sub>14</sub> (B. 37, 3989 C. 1904 [2] 1639).

- $C_{13}H_{16}O_8$  34) Aethylester d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-äthyläthersäure. Sd. 167—168°<sub>18</sub> (C. r. 138, 208 C. 1904 [1] 659; Bl. [3] 31, 516 C. 1904 [1] 1602).
- $C_{13}H_{16}O_4$  35) Aethylester d.  $\beta$ -Keto- $\alpha$ -Phenylbutan- $\alpha$ -Carbonsäure (Ac. d. Propionylphenylessigsäure). Sd. 154—156°<sub>18</sub> (B. 36, 2243 C. 1903 [2] 435).
- 31) Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[2,4,5-Trioxyphenyl]- $\alpha$ -Buten. Sm. 96,5° (Ar. 242, 102 C. 1904 [1] 1008).
- 32) Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[2,4,6-Trioxyphenyl]- $\alpha$ -Buten. Sm. 118—120° (M. 24, 870 C. 1904 [1] 368).
- 33) Aethylester d.  $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Dimethyläthersäure. Sm. 59°; Sd. 196—197°<sub>11</sub> (C. 1903 [1] 580; Soc. 85, 1904).
- 34) Aethylester d. isom.  $\beta$ -[2,4-Dioxyphenyl]akryl-2,4-Dimethyläthersäure. Sm. 61°; Sd. 208°<sub>13</sub> (C. 1903 [1] 580; Soc. 85, 162 C. 1904 [1] 724).
- $C_{13}H_{16}O_5$  15) Trimethyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2,3,4-Trioxyphenyl]butan. Sm. 65° (B. 36, 2191 C. 1903 [2] 384).
- 16) Trimethyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2,4,6-Trioxyphenyl]butan. Sm. 94—95° (B. 37, 2100 C. 1904 [2] 122).
- 17) Methyläther d.  $\beta$ -[2,4,6-Trioxyphenyl]akryltrimethyläthersäure. Sm. 134—135° (M. 24, 869 C. 1904 [1] 368).
- $C_{13}H_{16}O_6$  \*1)  $\beta$ -Pikroerythrin (Bl. [3] 31, 613 C. 1904 [2] 99).
- $C_{13}H_{16}O_7$  9) Dimethylester d. 3,4-Dioxybenzoldimethyläther-1-Carbonsäure-2-Oxyessigsäure. Sm. 84—87° (M. 25, 892 C. 1904 [2] 1313).
- $C_{13}H_{16}O_{10}$  C 47,0 — H 4,8 — O 48,2 — M. G. 332.
- 1) Glykogallin. Sm. 200° u. Zers. (C. 1903 [1] 883; C. r. 136, 386 C. 1903 [1] 722).
- 2) Pentamethylester d. Propen- $\alpha\alpha\beta\gamma\gamma$ -Pentacarbonsäure (P. d. Dicarboxyacetonitssäure). Sm. 62°. Na, Methylaminsalz (A. 327, 233 C. 1903 [1] 1406).
- $C_{13}H_{16}N_2$  8) 3-Propyl-5-Phenylpyrazol. Sm. 105° (C. r. 139, 296 C. 1904 [2] 710).
- 9) Nitril d.  $\alpha$ -Phenyl- $\alpha$ -[1-Piperidyl]essigsäure. Sm. 62—63° (63—64°) (B. 37, 4086 C. 1904 [2] 1724).
- $C_{13}H_{16}N_4$  3) 2-Amido-6-Phenylamido-4-Methyl-5-Aethyl-1,3-Diazin. Sm. 158 bis 159° (B. 36, 1920 C. 1903 [2] 208).
- $C_{13}H_{17}N$  \*5) 1,3,3-Trimethyl-2-Aethyliden-2,3-Dihydroindol. Sd. 257°<sub>757</sub>. (HCl, AuCl<sub>3</sub>) (G. 32 [2] 434 C. 1903 [1] 838).
- \*6) 2-Methylen-1,3-Dimethyl-3-Aethyl-2,3-Dihydroindol (G. 32 [2] 406 C. 1903 [1] 838).
- 21) Diallyl-2-Methylphenylamin. Sd. 229—232°. Pikrat (C. 1903 [2] 28).
- 22) Diallyl-3-Methylphenylamin. Sd. 245—249°. Pikrat (C. 1903 [2] 28).
- 23) Diallyl-4-Methylphenylamin. Sd. 252—257°. Pikrat (C. 1903 [2] 28).
- 24) 2 [oder 4]-Methylhexahydrocarbazol. Sm. 102—103°. (2HCl, PtCl<sub>4</sub>), HBr. HJ (C. 1904 [2] 343).
- $C_{13}H_{17}N_3$  2) 3-Methylimido-1,4,5-Trimethyl-2-Phenyl-2,3-Dihydropyrazol. Pikrat (B. 36, 3289 C. 1903 [2] 1191).
- 3) 3-Aethylimido-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Pikrat (B. 36, 3287 C. 1903 [2] 1190).
- $C_{13}H_{18}O$  16)  $\alpha$ -Oxybenzylhexahydrobenzol. Sm. 41°; Sd. 168°<sub>20</sub> (C. r. 139, 345 C. 1904 [2] 704).
- 17) 1-Oxy-1-Benzylhexahydrobenzol. Sm. 33°; Sd. 160°<sub>20</sub> (C. r. 138, 1322 C. 1904 [2] 219).
- 18) 1-Oxy-1-[4-Methylphenyl]hexahydrobenzol. Sm. 0°; Sd. 151°<sub>20</sub> (C. r. 138, 1322 C. 1904 [2] 219).
- 19) Aethyläther d.  $\gamma$ -[2-Oxyphenyl]- $\beta$ -Penten. Sd. 121—122,5°<sub>21</sub> (Bl. [3] 29, 354 C. 1903 [1] 1222).
- 20) Isopropyl-2,4,6-Trimethylphenylketon. Sd. 142°<sub>20</sub> (B. 37, 928 C. 1904 [1] 1209).
- $C_{13}H_{18}O_2$  \*23) Aethyläther d. Propyl-6-Oxy-3-Methylphenylketon. Sd. 205°<sub>100</sub> (B. 36, 3892 C. 1904 [1] 93).
- 32)  $\alpha$ -Oxyäthyl-2-Methyl-5-Isopropylphenylketon. Sd. 153°<sub>16</sub> (C. 1899 [1] 959). — \*III, 125.
- 33) Aldehyd d. Oxymethyl-tert. Butylbenzoldimethyläthercarbonsäure. Sm. 78°; Sd. 280—285° (D.R.P. 94019). — \*III, 67.
- $C_{13}H_{18}O_3$  40) Aldehyd d.  $\alpha$ -Oxy- $\alpha$ -[3-Aethoxyphenyl]- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Fl. (M. 24, 169 C. 1903 [1] 968).

- $C_{15}H_{18}O_3$  41) Aethylester d.  $\beta$ -Oxy- $\beta$ -Phenyl- $\alpha$ -Dimethylpropionsäure. Sm. 39°; Sd. 219°<sub>120</sub> (*J. r.* 28, 595). — \*II, 937.
- $C_{15}H_{18}O_4$  16)  $\beta\beta$ -Dioxy- $\beta$ -Phenylpropiondiäthyläthersäure. Sm. 68° (*C. r.* 138, 207 *C.* 1904 [1] 659).
- 17) Aethylester d. 2,4-Dioxybenzoldiäthyläthersäure. Fl. (*M.* 24, 893 *C.* 1904 [1] 512).
- $C_{15}H_{18}O_5$  14) 4-Keto-1,3-Diacetyl-1,3-Di[Oxymethyl]-6-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 145° (*B.* 36, 2174 *C.* 1903 [2] 371).
- 15) Methylester d. 2,4,6-Trioxy-1,3-Dimethylbenzoltrimethyläther-5-Carbonsäure. Sm. 49–50°; Sd. 178–180°<sub>15</sub> (*M.* 24, 107 *C.* 1903 [1] 966).
- 16) Aethylester d. 5-Oxy-1,4-Pyronamyläther-2-Carbonsäure (Ac. d. Komenamyläthersäure). Sm. 79–80° (*G.* 33 [2] 266 *C.* 1904 [1] 45).
- $C_{15}H_{18}O_6$  11) Dimethylester d. 3-Keto-4-Oxy-1,1,2-Trimethyl-2,3-Dihydro-R-Penten-4-Methyläther-2,5-Dicarbonsäure. Sd. 167–168°<sub>12</sub> (*B.* 36, 4335 *C.* 1904 [1] 456).
- $C_{15}H_{18}O_8$  3) Säure (aus Cholesterin).  $Cu_2 + 2H_2O$ ,  $Ag_3$  (*M.* 24, 180 *C.* 1903 [2] 20).
- $C_{15}H_{18}Br_2$  3)  $\beta\gamma$ -Dibrom- $\gamma$ -Phenyl- $\beta$ -Methylhexan. Fl. (*B.* 37, 1726 *C.* 1904 [1] 1516).
- 4)  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylpropen (*M.* 24, 257 *C.* 1903 [2] 243).
- 5)  $\alpha\beta$ -Dibrom- $\alpha$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylpropan. Fl. (*B.* 37, 929 *C.* 1904 [1] 1209).
- $C_{15}H_{19}O_8$  1) Aucubin +  $H_2O$  (*C. r.* 138, 1115 *C.* 1904 [1] 1652).
- $C_{15}H_{19}N$  13) Phenyl-3-Methylhexahydrophenylamin. Sd. 175°<sub>20</sub> (*C. r.* 138, 1258 *C.* 1904 [2] 105).
- 14) d-2-[ $\beta$ -Phenyläthyl]hexahydropyridin (d-Stilbazolin). d-Tartrat (*B.* 36, 3696 *C.* 1903 [2] 1382; *B.* 37, 3688 *C.* 1904 [2] 1508).
- 15) l-2-[ $\beta$ -Phenyläthyl]hexahydropyridin. d-Tartrat +  $H_2O$  (*B.* 36, 3696 *C.* 1903 [2] 1382; *B.* 37, 3688 *C.* 1904 [2] 1508).
- 16) Isostilbazolin. Sd. 156–158°<sub>20</sub>. Tartrat, Camphersulfonat (*B.* 36, 3696 *C.* 1903 [2] 1382; *B.* 37, 3688 *C.* 1904 [2] 1508).
- 17) l,3,3-Trimethyl-2-Aethyl-2,3-Dihydroindol. Sd. 141°<sub>21</sub>. Pikrat (*G.* 32 [2] 438 *C.* 1903 [1] 838).
- $C_{15}H_{19}Cl$  2)  $\gamma$ -Chlor- $\gamma$ -Phenyl- $\beta$ -Methylhexan. Fl. (*B.* 37, 1726 *C.* 1904 [1] 1516).
- 3)  $\alpha$ -Chlor- $\alpha$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylpropan. Fl. (*B.* 37, 929 *C.* 1904 [1] 1209).
- $C_{15}H_{20}O$  \*16)  $\alpha$ -Jonon. Sd. 134,3°<sub>16</sub>. +  $NaHSO_3$  +  $1\frac{1}{2}H_2O$  +  $KHSO_3$  (*C.* 1904 [1] 280, 282; D.R.P. 139959 *C.* 1903 [1] 858).
- \*17)  $\beta$ -Jonon. Sd. 140,4°<sub>16</sub>. +  $NaHSO_3$  +  $2H_2O$  +  $Ca(H_2SO_3)_2$  +  $4H_2O$  (*C.* 1904 [1] 281, 282; D.R.P. 138100 *C.* 1903 [1] 304).
- \*18) Pseudojonon (D.R.P. 147839 *C.* 1904 [1] 128).
- 28)  $\gamma$ -Oxy- $\gamma$ -Phenyl- $\beta$ -Methylhexan. Sd. 230–232°<sub>75</sub> (*B.* 37, 1726 *C.* 1904 [1] 1515).
- 29)  $\alpha$ -Oxy- $\alpha$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylpropan. Sd. 149–150°<sub>19</sub> (*B.* 37, 928 *C.* 1904 [1] 1209).
- 30) Isoamyläther d. 2-Methyl-1-Oxymethylbenzol. Sd. 124°<sub>15</sub> (D.R.P. 154658 *C.* 1904 [2] 1355).
- 31) Isopropylidencampher. Sd. 200–204°<sub>78</sub> (*B.* 35, 3911 *C.* 1903 [1] 29; *B.* 36, 2631 *C.* 1903 [2] 625).
- 32) Allylcampher. Sd. 130°<sub>28</sub> (*C. r.* 136, 790 *C.* 1903 [1] 1086).
- 33) Camphenilidenaceton. Sd. 147–150°<sub>22</sub> (D.R.P. 138211 *C.* 1903 [1] 269).
- $C_{15}H_{20}O_2$  16) Propionylcampher (Oxypropylidencampher). Sd. 138,5°<sub>11</sub>. Cu (*B.* 36, 2638 *C.* 1903 [2] 626; *B.* 37, 763 *C.* 1904 [1] 1085; *B.* 37, 2181 *C.* 1904 [2] 224).
- 17) 9-Methyl-3-Isopropenylbicyclo-[1,3,3]-nonan-5-ol-7-on. Sd. 182 bis 183°<sub>12–15</sub> (*B.* 36, 228 *C.* 1903 [1] 514).
- 18) Beljiabieninsäure. Sm. 113–115°. K (*Ar.* 240, 586 *C.* 1903 [1] 164).
- 19) Galbanumsäure. Sm. 155–156°. K, Ba, Ag (*Ar.* 242, 533 *C.* 1904 [2] 1418).
- 20) Palabieninsäure. Sm. 110° (*Ar.* 240, 575 *C.* 1903 [1] 163).

- $C_{13}H_{20}O_2$  21) Methylester d. Citrylidenessigsäure. *Sd.* 133°<sub>10</sub> (D.R.P. 153575 *C.* 1904 [2] 677).  
 22) Methylester d. Cyklocitrylidenessigsäure. *Sd.* 138°<sub>17</sub> (D.R.P. 153575 *C.* 1904 [2] 678).
- $C_{13}H_{20}O_3$  \*6) Methylester d.  $\alpha$ -Methylcamphocarbonsäure. *Sm.* 85° (*C. r.* 137, 1067 *C.* 1904 [1] 282).  
 \*7) Aethylester d. Camphocarbonsäure. *Sd.* 164°<sub>20</sub> (*C. r.* 136, 240 *C.* 1903 [1] 584; *B.* 37, 3947 *C.* 1904 [2] 1569).  
 16) 2,3-Dimethyläther-5-Aethyläther d. 2,3,5-Trioxy-1-Propylbenzol. *Sd.* 144—150°<sub>11</sub> (*Ar.* 242, 346 *C.* 1904 [2] 525).  
 17) 2,5-Dimethyläther-3-Aethyläther d. 2,3,5-Trioxy-1-Propylbenzol. *Sd.* 147—149°<sub>12</sub> (*B.* 36, 1719 *C.* 1903 [2] 114).  
 18) 3-Aethyläther d.  $\alpha\gamma$ -Dioxy- $\alpha$ -[3-Oxyphenyl]- $\beta\beta$ -Dimethylpropan. *Sd.* 210°<sub>19</sub> (*M.* 24, 171 *C.* 1903 [1] 968).  
 19) Oxyketoisopropenylmethylbicyklononan. *Sd.* 175—185°<sub>15</sub> (*B.* 37, 1670 *C.* 1904 [1] 1606).  
 20) Methylester d.  $\beta$ -Methylcamphocarbonsäure. *Sd.* 135—140°<sub>13</sub> (*C. r.* 137, 1067 *C.* 1904 [1] 282).  
 21) d-Bornylester d. Brenztraubensäure. *Sd.* 149—150°<sub>15</sub> (*P. Ch. S.* No. 230). — \*III, 338.  
 22) Aethylcarbonat d. Campher (Carboxyäthylcampher). *Fl.* (*C.* 1903 [1] 922).
- $C_{13}H_{20}O_6$  \*2) Diäthylester d.  $\beta\zeta$ -Diketopentan- $\gamma\epsilon$ -Dicarbonsäure. *Sd.* 215—218°<sub>25-27</sub> (*A.* 332, 10 *C.* 1904 [1] 1564).  
 \*9) Diäthylester d. 1-Oxy-5-Keto-1-Methylhexahydrobenzol-2,4-Dicarbonsäure. *Sm.* 79° (*A.* 332, 12 *C.* 1904 [1] 1564).  
 11)  $\beta\beta\delta\delta$ -Tetraacetyl- $\alpha\epsilon$ -Dioxy-pentan + 2H<sub>2</sub>O. *Sm.* 95° (129° wasserfrei) (*B.* 36, 2172 *C.* 1903 [2] 371).  
 12) Diäthylester d. 2,6-Dioxy-2-Methyl-1,2,3,4-Tetrahydrobenzol-3,5-Dicarbonsäure. *Fl.* Na (*A.* 332, 15 *C.* 1904 [1] 1564).  
 13) Triäthylester d. 1-Methyl-R-Trimethylen-2,2,3-Tricarbonsäure. *Sd.* 163—164°<sub>15</sub> (*B.* 36, 1085 *C.* 1903 [1] 1126).
- $C_{13}H_{20}N_2$  5) Verbindung (aus d. Verb.  $C_{13}H_{14}N_2$ ). *Sd.* 153°<sub>11</sub>. 2HCl (*M.* 25, 1078 *C.* 1904 [2] 1659).
- $C_{13}H_{22}O$  8) Allyläther d. l-Borneol. *Sd.* 105—107°<sub>17</sub> (*C. r.* 138, 1665 *C.* 1904 [2] 441).  
 9) Allyläther d. l-Linalool. *Sd.* 103—105°<sub>16</sub> (*C. r.* 138, 1667 *C.* 1904 [2] 441).  
 10)  $\alpha$ -Keto- $\beta\zeta$ -Dimethyl- $\alpha\theta$ -Undekadien (Citronellalacetone). *Sd.* 142 bis 144,5°<sub>14</sub> (D.R.P. 75128; *B.* 36, 2801 *C.* 1903 [2] 878).  
 11) Di[Hexahydrophenyl]keton. *Sd.* 159°<sub>20</sub> (*C. r.* 139, 346 *C.* 1904 [2] 705).  
 12) Allylmenthon. *Sd.* 134—137°<sub>20</sub> (*C. r.* 138, 1140 *C.* 1904 [2] 106).  
 13) Vetiron. *Sd.* 149—150°<sub>10</sub> (D.R.P. 142415 *C.* 1903 [2] 79).  
 14) Keton (aus Methylpropylketon und Acetylchlorid). *Sd.* oberh. 300° (*C.* 1903 [2] 656).
- $C_{13}H_{22}O_2$  9) Pseudojononhydrat. *Sd.* 176—178°<sub>9</sub> (D.R.P. 143724 *C.* 1903 [2] 473).  
 10)  $\alpha$ -Oxyisopropylcampher. *Sm.* 88°; *Sd.* 210—215° (*B.* 35, 3911 *C.* 1903 [1] 29; *B.* 36, 2630 *C.* 1903 [2] 625).  
 11) 9-Methyl-3-Isopropenylbicyklo-[1,3,3]-Nonan-5,7-diol. *Sm.* 172 bis 173° (*B.* 36, 231 *C.* 1903 [1] 514).  
 12) isom. 9-Methyl-3-Isopropenylbicyklo-[1,3,3]-Nonan-5,7-diol. *Sd.* 198°<sub>15</sub> (*B.* 36, 232 *C.* 1903 [1] 514).  
 13) Methylester d.  $\alpha$ -Undekin- $\alpha$ -Carbonsäure. *Sd.* 168—172°<sub>30</sub> (*Bl.* [3] 29, 661 *C.* 1903 [2] 487; *C. r.* 136, 554 *C.* 1903 [1] 825).  
 14) Methylester d.  $\beta\zeta$ -Dimethyl- $\alpha\theta$ -Nonadien- $\iota$ -Carbonsäure. *Sd.* 135 bis 137°<sub>14</sub> (*B.* 36, 2799 *C.* 1903 [2] 877).  
 15) Propionat d. d-Borneol. *Sd.* 109—110°<sub>10-11</sub> (D.R.P. 80711). — \*III, 337.  
 16) Propionat d. Isoborneol. *Sd.* 150°<sub>13</sub> (*C. r.* 136, 239 *C.* 1903 [1] 584).  
 17) Propionat d. l-Linalool. *Sd.* 115°<sub>10-11</sub> (D.R.P. 80711). — \*III, 346.
- $C_{13}H_{22}O_3$  8) Aethylester d. 3-Keto-1-Methyl-2-Isobutyl-R-Pentamethylen-2-Carbonsäure. *Sd.* 188—190°<sub>18</sub> (*C. r.* 138, 210 *C.* 1904 [1] 663).

- $C_{18}H_{22}O_3$  9) r-Rhodinolester d. Brenztraubensäure. Sd.  $143^{\circ}_{10}$  (*C. r.* 138, 1701 *C.* 1904 [2] 440).
- $C_{18}H_{22}O_4$  15)  $\beta$ -Aethylhomocampfersäure. Sm. 135—140° (*C. r.* 138, 578 *C.* 1904 [1] 949).
- 16) Diacetat d. 5-Oxy-2-Oxymethyl-1,3-Dimethylhexahydrobenzol. Sd.  $160^{\circ}_{13}$  (D.R.P. 148207 *C.* 1904 [1] 487).
- $C_{18}H_{22}O_6$  16) Triacetat d.  $\delta$ -Oxy- $\gamma\gamma$ -Di[Oxymethyl]- $\beta$ -Methylbutan. Sm. 33—34° (*B.* 36, 1346 *C.* 1903 [1] 1298).
- 17)  $\beta$ -Acetat- $\alpha\gamma$ -Dibutyrat d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 289—291° (*C.* 1903 [1] 134).
- $C_{18}H_{24}O$  2)  $\alpha$ -Oxydi[Hexahydrophenyl]methan. Sm. 63°; Sd.  $166^{\circ}_{20}$  (*C. r.* 139, 345 *C.* 1904 [2] 705).
- 3) Allyläther d. l-Menthol. Sd. 103—104°<sub>18</sub> (*C. r.* 138, 1665 *C.* 1904 [2] 441).
- 4) Propylmenthon. Sd. 128—132°<sub>19</sub> (*C. r.* 138, 1140 *C.* 1904 [2] 106).
- $C_{18}H_{24}O_2$  9) Diäthyläther d.  $\alpha\alpha$ -Dioxy- $\beta$ -Nonin. Sd.  $127^{\circ}_{11}$  (*C. r.* 138, 1340 *C.* 1904 [2] 187).
- 10) Propionat d. l-Menthol. Sd.  $118^{\circ}_{15}$  (*B.* 31, 364). — \*III, 333.
- $C_{18}H_{24}O_3$  7) Caprylat d.  $\alpha$ -Oxy- $\beta$ -Ketopropan. Sd. 165—170°<sub>25</sub> (*C. r.* 138, 1275 *C.* 1904 [2] 93).
- $C_{18}H_{24}O_4$  \*1) Brassylsäure (*G.* 34 [2] 54 *C.* 1904 [2] 693).
- 21) Diacetat d.  $\alpha\alpha$ -Dioxy-nonan. Sd.  $161^{\circ}_9$  (*M.* 25, 1086 *C.* 1904 [2] 1698).
- $C_{18}H_{24}O_5$  \*2) Diäthylester d.  $\gamma$ -Oxy- $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure (*Bl.* [3] 31, 117 *C.* 1904 [1] 643).
- $C_{18}H_{26}O$  \*2)  $\beta$ -Ketotridekan. Sm. 28°; Sd. 140—142°<sub>14-15</sub> (*Bl.* [3] 29, 1128 *C.* 1904 [1] 258).
- 6) Aldehyd d. Dodekan- $\alpha$ -Carbonsäure. Sd.  $152^{\circ}_{24}$  (*C. r.* 138, 699 *C.* 1904 [1] 1066).
- $C_{18}H_{26}O_2$  10) Methylester d. Laurinsäure. Sm. 5°; Sd.  $148^{\circ}_{18}$  (*Bl.* [3] 29, 1121 *C.* 1904 [1] 259).
- $C_{18}H_{30}N_2$  \*1) Di[Dipropylamido]methan. Sd.  $115^{\circ}_{15}$  (*B.* 36, 1197 *C.* 1903 [1] 1215).
- $C_{18}O_3Cl_{10}$  \*1) Di[Pentachlorphenylester] d. Kohlensäure. Sm. 258° (*C. r.* 138, 981 *C.* 1904 [1] 1413).

## — 13 III —

- $C_{18}HO_3Cl_9$  1) 2,3,4,5,6,2',3',4',6'-Nonachlordiphenylester d. Kohlensäure. Sm. 168—169° (*C. r.* 138, 981 *C.* 1904 [1] 1413).
- $C_{18}H_2O_3Cl_8$  1) 2,3,4,6,2',3',4',6'-Oktochlordiphenylester d. Kohlensäure. Sm. 67° (*C. r.* 138, 981 *C.* 1904 [1] 1413).
- $C_{18}H_3O_3Cl_7$  1) 2,3,4,6,2',4',6'-Heptachlordiphenylester d. Kohlensäure. Sm. 175 bis 176° (*C. r.* 138, 981 *C.* 1904 [1] 1413).
- $C_{18}H_4O_2Br_6$  1) 2,3,5-Tribrom-4-Keto-1-[2,3,5-Tribrom-4-Oxybenzyliden]-1,4-Dihydrobenzol. Sm. 245° (*A.* 330, 71 *C.* 1904 [1] 1148).
- $C_{18}H_4O_3Cl_6$  1) 2,4,6,2',4',6'-Hexachlordiphenylester d. Kohlensäure. Sm. 153 bis 154° (*C. r.* 138, 911 *C.* 1904 [1] 1412).
- $C_{18}H_4O_5Br_4$  1)  $\alpha$ -Verbindung (aus Methylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon). Zers. bei 50° (*Am.* 31, 97 *C.* 1904 [1] 802).
- 2)  $\beta$ -Verbindung (aus Methylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon). Sm. 261° u. Zers. (*B.* 36, 454 *C.* 1903 [1] 574; *Am.* 31, 98 *C.* 1904 [1] 802).
- $C_{18}H_5O_2Cl_6$  \*1) Pentachlorphenylester d. Benzolcarbonsäure. Sm. 164—165° (*B.* 37, 4020 *C.* 1904 [2] 1717).
- $C_{18}H_5O_2Br_7$  1)  $\alpha$ ,2,3,5,2',3',5'-Heptabrom-4,4'-Dioxybiphenylmethan. Sm. 205 bis 206° u. Zers. (*A.* 330, 68 *C.* 1904 [1] 1147).
- $C_{18}H_5O_3Cl_5$  1) 2,4,6,2',4'-Pentachlorphenylester d. Kohlensäure. Sm. 94° (*C. r.* 138, 911 *C.* 1904 [1] 1412).
- 2) isom. Pentachlordiphenylester d. Kohlensäure. Sm. 130° (*C. r.* 138, 981 *C.* 1904 [1] 1413).
- $C_{18}H_6OBr_2$  \*3) p-Dibrom-9-Ketofluoren. Sm. 202° (197—198°) (*B.* 37, 3030 *C.* 1904 [2] 1225).
- $C_{18}H_6O_2Cl_4$  \*1) 2,3,4,6-Tetrachlorphenylester d. Benzolcarbonsäure. Sm. 115° (*B.* 37, 4015 *C.* 1904 [2] 1716).

- $C_{18}H_8O_2Br_6$  2) 2, 3, 5, 2', 3', 5'-Hexabrom-4, 4'-Dioxydiphenylmethan. Sm. 204° (A. 330, 67, 80 C. 1904 [1] 1147).
- $C_{18}H_8O_3Cl_4$  1) 2, 4, 2', 4'-Tetrachlorphenylester d. Kohlensäure. Sm. 122—123° (C. r. 138, 911 C. 1904 [1] 1412).
- 2) isom. 2, 4, 2', 4'-Tetrachlordiphenylester d. Kohlensäure. Sm. 88 bis 89° (C. r. 138, 911 C. 1904 [1] 1412).
- $C_{18}H_8O_3Br_6$  1) 2, 3, 5, 2', 3', 5'-Hexabrom- $\alpha$ , 4, 4'-Trioxydiphenylmethan. Sm. 250° u. Zers. (A. 330, 75 C. 1904 [1] 1148).
- $C_{18}H_8O_4N_4$  1) Nitril d. 6-Oxy-2-Keto-4-[4-Nitrophenyl]-2, 5-Dihydropyridin-3, 5-Dicarbonsäure. Zers. bei 270—275°.  $NH_4 + 1\frac{1}{2}H_2O$ , Ba +  $6H_2O$  (C. 1904 [1] 878).
- $C_{18}H_8O_{11}N_4$  2) 3, 5, 3', 5'-Tetranitro-4, 4'-Dioxydiphenylketon. Sm. 203° (G. 34 [1] 382 C. 1904 [2] 111).
- $C_{18}H_8O_{13}N_6$  C 34,4 — H 1,3 — O 45,8 — N 18,5 — M. G. 454.
- 1) Hexanitro-4-Methyldiphenyläther (C. 1903 [1] 634).
- $C_{18}H_7OCl_5$  1) Benzyläther d. Pentachloroxybenzol. Sm. 167—168° (B. 37, 4020 C. 1904 [2] 1717).
- $C_{18}H_7OBr_5$  1) 2, 3, 5, 6, 4'-Pentabrom-4-Oxydiphenylmethan. Sm. 146—147° (A. 334, 376 C. 1904 [2] 1051).
- $C_{18}H_7O_3Cl_3$  2) 2, 4, 4'-Trichlordiphenylester d. Kohlensäure. Sm. 115° (C. r. 138, 911 C. 1904 [1] 1412).
- 3) P-Trichlordiphenylester d. Kohlensäure. Sm. unterhalb 100° (C. r. 138, 911 C. 1904 [1] 1412).
- $C_{18}H_7O_4N_3$  2) Nitril d. 2, 6-Diketo-4-[3, 4-Dioxyphenyl]-1, 2, 3, 6-Tetrahydropyridin-3, 5-Dicarbonsäure. 2 isom. Formen.  $NH_4 + H_2O$ , Ba +  $H_2O$  (C. 1904 [2] 903).
- $C_{18}H_8OCl_2$  \*1) 4, 4'-Dichlordiphenylketon. Sm. 145° (146°) (C. r. 137, 711 C. 1903 [2] 1442; G. 34 [1] 376 C. 1904 [2] 110).
- 3) 2, 4'-Dichlordiphenylketon. Sm. 66,5—67°; Sd. 214—215°<sub>22</sub> (Am. 30, 397 C. 1904 [1] 284).
- $C_{18}H_8OBr_2$  \*1) 2, 4'-Dibromdiphenylketon. Sm. 50—52° (Am. 30, 453 C. 1904 [1] 377).
- \*3) 4, 4'-Dibromdiphenylketon. Sm. 171—172° (172—173°) (C. r. 137, 710 C. 1903 [2] 1442; Am. 30, 451 C. 1904 [1] 377).
- 4) 3, 5-Dibrom-4-Keto-1-Benzyliden-1, 4-Dihydrobenzol +  $H_2O$ . Sm. 135—136° (A. 334, 377 C. 1904 [2] 1051).
- 5) 3, 4'-Dibromdiphenylketon. Sm. 130° (B. 37, 3485 C. 1904 [2] 1131).
- $C_{18}H_8O_2Br_4$  \*1) 3, 5, 3', 5'-Tetrabrom-4, 4'-Dioxydiphenylmethan. +  $2C_2H_4O_2$  (Sm. 226—227°) (B. 36, 1884 C. 1903 [2] 291; A. 330, 66 C. 1904 [1] 1147).
- $C_{18}H_8O_3J_2$  3) 3, 4-Dijodphenylester d. Benzolcarbonsäure. Sm. 123° (C. r. 136, 1079 C. 1903 [1] 1339).
- $C_{18}H_8O_3Cl_2$  \*2) 4, 4'-Dichlordiphenylester d. Kohlensäure. Sm. 144—145° (C. r. 138, 910 C. 1904 [1] 1412).
- $C_{18}H_8O_6N_4$  C 49,3 — H 2,5 — O 30,4 — N 17,7 — M. G. 316.
- 1) 2, 4, 6-Trinitro-1-Phenylimidomethylbenzol. Sm. 162° (B. 36, 961 C. 1903 [1] 969).
- $C_{18}H_8O_6N_6$  C 45,3 — H 2,3 — O 27,9 — N 24,4 — M. G. 344.
- 1) 6-[2, 4, 6-Trinitrophenyl]amidoindazol. Zers. bei 240° (B. 37, 2582 C. 1904 [2] 659).
- $C_{18}H_8O_7N_2$  4) 3, 3'-Dinitro-4, 4'-Dioxydiphenylketon. Sm. 172° (G. 34 [1] 385 C. 1904 [2] 111).
- $C_{18}H_8O_8N_6$  3) 4-Nitrophenyl-2, 4, 6-Trinitrobenzylidenhydrazin. Sm. 247° (B. 36, 961 C. 1903 [1] 969).
- $C_{18}H_8O_9N_6$  \*2) 3, 5, 3', 5'-Tetranitro-4, 4'-Diamidodiphenylketon. Sm. 270° (G. 34 [1] 383 C. 1904 [2] 111).
- $C_{18}H_8O_{10}N_6$  C 38,2 — H 2,0 — O 39,2 — N 20,6 — M. G. 408.
- 1) 2, 4, 6-Trinitrophenyl-4-Nitrobenzylnitramin. Sm. 141° u. Zers. (R. 21, 429 C. 1903 [1] 506).
- $C_{18}H_9ON$  20) Phenylanthranil. Sm. 52—53° (B. 36, 1615 C. 1903 [2] 36).
- $C_{18}H_9ON_3$  4) 3-[2-Oxyphenyl]-1, 2, 4-Benzotriazin. Sm. 167° (C. 1903 [2] 427).
- $C_{18}H_9ON_5$  C 62,1 — H 3,6 — O 6,4 — N 27,9 — M. G. 251.
- 1) 4-Benzoylbenzoldiazoniumazid. Zers. bei 116—117° (B. 36, 2058 C. 1903 [2] 356).

- $C_{13}H_9OBr_3$  3) 3,5,4'-Tribrom-4-Oxydiphenylmethan. Sm. 88° (A. 334, 375 C. 1904 [2] 1051).
- $C_{13}H_9O_2N$  \*3) 5-Oxy-1-Phenylbenzoxazol. Sm. 217° (B. 35, 4202 C. 1903 [1] 146).  
 17)  $\alpha$ -Diketo- $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthan. Sm. 78—79° (HCl, Pikrat (B. 36, 125 C. 1903 [1] 470)).  
 18) 3-Oxy-1-Phenylbenzoxazol. Sm. 188—189° (B. 37, 3111 C. 1904 [2] 995; B. 37, 3775 Berichtigung).  
 19) 3-Oxy-5-Keto-5,10-Dihydroakridin. Sm. 327—330° (C. 1904 [2] 720).
- $C_{13}H_9O_2N_3$  13) 7-Semicarbazon-8-Ketoacenaphten. Sm. 192—193° (G. 33 [1] 46 C. 1903 [1] 882).
- $C_{13}H_9O_2Br$  \*5) 4-Bromphenylester d. Benzolcarbonsäure. Sm. 101—102° (Soc. 85, 1227 C. 1904 [2] 1032).
- $C_{13}H_9O_2J$  1) 3-Jodphenylester d. Benzolcarbonsäure. Sm. 70° (A. 332, 66 C. 1904 [2] 42).
- $C_{13}H_9O_3N$  14) Naphtostyryl- N - Methylcarbonsäure (peri-Naphtostyrylessigsäure). Sm. 258—259°. Na, Ag (B. 35, 4220 C. 1903 [1] 166).
- $C_{13}H_9O_3N_3$  5) 2-[4-Oxyphenyl]-2,1,3-Benzotriazol-2<sup>3</sup>-Carbonsäure. Sm. 296—297° (J. pr. [2] 67, 583 C. 1903 [2] 205).  
 6) 3-Amido-2-Oxy-5,10-Naphtdiazin-7-Carbonsäure. Sm. noch nicht bei 360° (B. 36, 4032 C. 1904 [1] 294).  
 7) Aldehyd d. 3'-Nitroazobenzol-4-Carbonsäure. Sm. 223° (Am. 32, 398 C. 1904 [2] 1499).  
 8) Aethylester d.  $\alpha$ -Phenyl- $\gamma$ -Aethylsemicarbazidoessigsäure. Sm. 97 bis 98° (B. 36, 3885 C. 1904 [1] 27).
- $C_{13}H_9O_3Cl$  \*2) 4-Chlordiphenylester d. Kohlensäure. Sm. 95—96° (C. r. 138, 910 C. 1904 [1] 1412).
- $C_{13}H_9O_3Br$  \*1) Phenylester d. 5-Brom-2-Oxybenzol-1-Carbonsäure. Sm. 112° (G. 34 [1] 277 C. 1904 [1] 1499).  
 6) Phenylester d. 3-Brom-2-Oxybenzol-1-Carbonsäure. Sm. 98° (G. 34 [1] 277 C. 1904 [1] 1499).
- $C_{13}H_9O_4N$  \*14) 3-Nitro-4'-Oxydiphenylketon. Sm. 173° (B. 36, 3891 C. 1904 [1] 93).  
 16) 4-Nitro-2'-Oxydiphenylketon. Sm. 111—113° (Ph. Ch. 32, 43; B. 36, 3897 C. 1904 [1] 93).  
 17) 4-Nitro-4'-Oxydiphenylketon. Sm. 190—192° (B. 36, 3897 C. 1904 [1] 94).
- $C_{13}H_9O_4N_5$  \*2) 6-[2,4-Dinitrophenyl]amidoindazol. Sm. 261° (B. 37, 2582 C. 1904 [2] 659).
- $C_{13}H_9O_4Cl$  1) 4'-Chlor-2,3,4-Trioxydiphenylketon. Sm. 154—155° (D.R.P. 49149, 50451). — \*III, 156.
- $C_{13}H_9O_5N_3$  13) 2'-Nitro-4-Oxyazobenzol-3-Carbonsäure. Sm. 215—217° (J. pr. [2] 27, 583 C. 1903 [2] 204).
- $C_{13}H_9O_5N$  3) Monobenzoat d. 4-Nitro-1,2,3-Trioxybenzol. Sm. 214° u. Zers. (B. 37, 116 C. 1904 [1] 585).
- $C_{13}H_9O_5N_5$  5) Phenyl-2,4,6-Trinitrobenzylidenhydrazin. Sm. 202° (B. 36, 960 C. 1903 [1] 969).
- $C_{13}H_9O_7N_3$  \*6) 5-[2,4-Dinitrophenyl]amido-2-Oxybenzol-1-Carbonsäure (D.R.P. 147862 C. 1904 [1] 235).
- $C_{13}H_9O_8N_5$  2) 2',4', $\rho$ , $\rho$ -Tetranitro-2-Methyldiphenylamin. Sm. 190° (B. 36, 31 C. 1903 [1] 520).  
 3) 2',4', $\rho$ , $\rho$ -Tetranitro-4-Methyldiphenylamin. Sm. 219° (B. 36, 32 C. 1903 [1] 520).
- $C_{13}H_9NCl_2$  8) 5,10-Dichlor-5,10-Dihydroakridin. Sm. 240° (Soc. 85, 1200 C. 1904 [2] 1059).
- $C_{13}H_9NBr_2$  1) 5,10-Dibrom-5,10-Dihydroakridin. Sm. 186—188° (Soc. 85, 1200 C. 1904 [2] 1059).
- $C_{13}H_9NBr_4$  3) 5,10-Dibrom-5,10-Dihydroakridindibromid. Sm. 220° u. Zers. (Soc. 85, 1200 C. 1904 [2] 1059).
- $C_{13}H_9NJ_2$  1) 5,10-Dijod-5,10-Dihydroakridin. Sm. 145° (Soc. 85, 1201 C. 1904 [2] 1059).
- $C_{13}H_9NSe$  1) 5-Selenoakridin. Sm. 238° (J. pr. [2] 68, 88 C. 1903 [2] 446).
- $C_{13}H_{10}ON_3$  \*1) Benzolazobenzoyl. Fl. (J. pr. [2] 70, 301 C. 1904 [2] 1566).  
 \*19) Aldehyd d. Azobenzol-4-Carbonsäure (C. r. 135, 1116 C. 1903 [1] 286).  
 20) Carbonyldiphenylhydrazin (B. 36, 3158 C. 1903 [2] 1057).

- $C_{13}H_{10}OBr_2$  3) 4,4'-Dibrom- $\alpha$ -Oxydiphenylmethan. Sm. 115—116° (*Am.* 30, 457 *C.* 1904 [1] 377).  
 4) 3,5-Dibrom-4-Oxydiphenylmethan. Sm. 44° (u. 57°) (*A.* 334, 374 *C.* 1904 [2] 1050).
- $C_{13}H_{10}OJ_2$  2) Benzyläther d. 3,4-Dijod-1-Oxybenzol. Fl. (*Bl.* [3] 29, 606 *C.* 1903 [2] 359).
- $C_{13}H_{10}OS$  \*2) Phenylester d. Benzolthiolcarbonsäure. Sm. 56° (*Bl.* [3] 29, 764 *C.* 1903 [2] 621).  
 3) 9-Oxythioxanthen. Sm. 150° (*B.* 34, 3310). — \*III, 597.
- $C_{13}H_{10}O_2N_2$  \*18) Azobenzol-4-Carbonsäure (*B.* 36, 3009 *C.* 1903 [2] 1031).  
 \*24) Phenylnitrosamid d. Benzolcarbonsäure (*A.* 325, 236 *C.* 1903 [1] 631).
- $C_{13}H_{10}O_2Br_2$  2) 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan. Sm. 164—165° (*A.* 334, 379 *C.* 1904 [2] 1051).  
 3) 3,5-Dibrom-4-Keto-1-[ $\alpha$ -Oxybenzyl]-1,4-Dihydrobenzol. Sm. oberh. 137—138° u. Zers. (*A.* 334, 380 *C.* 1904 [2] 1052).
- $C_{13}H_{10}O_2N_2$  31) Monobenzoat d. 1,4-Dioximido-1,4-Dihydrobenzol. Zers. bei 160° (*G.* 33 [1] 238 *C.* 1903 [1] 1409).
- $C_{13}H_{10}O_3N_4$  2)  $\alpha$ -Nitroso- $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Nitrophenyl]methan. Zers. bei 83,5—84° (*B.* 36, 80 *C.* 1903 [1] 452).  
 3)  $\alpha$ -Nitroso- $\alpha$ -Phenylhydrazon- $\alpha$ -[3-Nitrophenyl]methan. Zers. 98,5° (*B.* 36, 74 *C.* 1903 [1] 452; *B.* 36, 98 *C.* 1903 [1] 453).  
 4)  $\alpha$ -Nitroso- $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Nitrophenyl]methan. Zers. bei 79° (*B.* 36, 78 *C.* 1903 [1] 452).  
 5)  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[ $\alpha$ -Nitrosobenzyliden]hydrazin. Zers. bei 85—86° (*B.* 36, 351 *C.* 1903 [1] 574).  
 6)  $\alpha$ -Oximido- $\alpha$ -Phenylazo- $\alpha$ -[2-Nitrophenyl]methan. Sm. 153,5—154° (*B.* 36, 81 *C.* 1903 [1] 452).  
 7)  $\alpha$ -Oximido- $\alpha$ -Phenylazo- $\alpha$ -[3-Nitrophenyl]methan. Zers. bei 183° (*B.* 36, 72 *C.* 1903 [1] 452).  
 8)  $\alpha$ -Oximido- $\alpha$ -Phenylazo- $\alpha$ -[4-Nitrophenyl]methan. Sm. 180,8° (*B.* 36, 77 *C.* 1903 [1] 452).  
 9)  $\alpha$ -Oximido- $\alpha$ -[4-Nitrophenyl]azo- $\alpha$ -Phenylmethan. Sm. 142,5°. 3 +  $C_6H_6$  (*B.* 36, 357 *C.* 1903 [1] 575).
- $C_{13}H_{10}O_3S$  2) 4-Oxydiphenylsulfid-3-Carbonsäure? Sm. 168° (*B.* 36, 111 *C.* 1903 [1] 454; *D.R.P.* 147634 *C.* 1904 [1] 131).
- $C_{13}H_{10}O_4N_2$  25) 3'-Nitrodiphenylamin-2-Carbonsäure. Sm. 215° (*B.* 36, 2384 *C.* 1903 [2] 664).
- $C_{13}H_{10}O_4N_4$  \*11) 4-Nitrophenylhydrazonphenylnitromethan (*B.* 36, 355 *C.* 1903 [1] 575).  
 16)  $\alpha$ -Nitro- $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Nitrophenyl]methan. Sm. 146° (*B.* 36, 82 *C.* 1903 [1] 452).  
 17)  $\alpha$ -Nitro- $\alpha$ -Phenylhydrazon- $\alpha$ -[3-Nitrophenyl]methan. Sm. 135° (140,5°) (*B.* 36, 76 *C.* 1903 [1] 452; *B.* 36, 98 *C.* 1903 [1] 453).  
 18)  $\alpha$ -Nitro- $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Nitrophenyl]methan. Sm. 156,5° (*B.* 36, 79 *C.* 1903 [1] 452).  
 19)  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[2-Nitrobenzyliden]hydrazin. Sm. 250° (*R.* 22, 439 *C.* 1904 [1] 15).
- $C_{13}H_{10}O_5N_2$  14) 2',p-Dinitro-2-Methyldiphenyläther. Sm. 98° (*C.* 1903 [1] 634).  
 15) 4',p-Dinitro-2-Methyldiphenyläther. Sm. 125° (*C.* 1903 [1] 509).  
 16) 2',p-Dinitro-3-Methyldiphenyläther. Sm. 106° (*C.* 1903 [1] 634).  
 17) 4',p-Dinitro-3-Methyldiphenyläther. Sm. 103—104° (*Am.* 28, 479 *C.* 1903 [1] 327).  
 18) 2',p-Dinitro-4-Methyldiphenyläther. Sm. 100° (*C.* 1903 [1] 634).  
 19) 4',p-Dinitro-4-Methyldiphenyläther. Sm. 101° (*C.* 1903 [1] 634).
- $C_{13}H_{10}O_5N_4$  \*3) s-Di[3-Nitrophenyl]harnstoff. Sm. 233° (*M.* 25, 388 *C.* 1904 [2] 320).  
 8) 3,3'-Dinitro-4,4'-Diamidodiphenylketon. Sm. 121° (*G.* 34 [1] 379 *C.* 1904 [2] 111).
- $C_{13}H_{10}O_5S$  3) 3-Benzolsulfonat d. 3,4-Dioxybenzol-1-Carbonsäurealdehyd. Sm. 147° (*D.R.P.* 76493). — \*III, 76.  
 4) 4-Benzolsulfonat d. 3,4-Dioxybenzol-1-Carbonsäurealdehyd. Sm. 110° (*D.R.P.* 76493, 82747). — \*III, 76.
- $C_{13}H_{10}O_6N_4$  \*2) 2,4,6-Trinitro-3-Methyldiphenylamin. Sm. 150° (*B.* 37, 2095 *C.* 1904 [2] 34).

- $C_{18}H_{10}O_8N_4$  4) 2',4',6'-Trinitro-2-Methyldiphenylamin. Sm. 164° (B. 36, 31 C. 1903 [1] 520).  
5) 2',4',? -Trinitro-2-Methyldiphenylamin. Sm. 158° (B. 36, 30 C. 1903 [1] 520).
- $C_{18}H_{10}O_7N_4$  2) 2,4,6-Trinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 207° (B. 37, 2095 C. 1904 [2] 34).  
3) Methyläther d. 2,4,6-Trinitro-3-Oxydiphenylamin. Sm. 178° (B. 21, 324 C. 1903 [1] 79).
- $C_{18}H_{10}NJ$  1) Phenyl-4-Jodbenzylidenamin. Sm. 93° (A. 332, 75 C. 1904 [2] 43).  
 $C_{18}H_{10}N_2S$  \*6) 1-Phenylamidobenzthiazol. Sm. 159° (B. 36, 3127 C. 1903 [2] 1070).  
 $C_{18}H_{11}ON$  \*5) 2-Amidodiphenylketon. Sm. 105° (B. 35, 4276 C. 1903 [1] 333).  
\*8)  $\alpha$ -Oximidodiphenylmethan. Sm. 143,5—144° (B. 36, 704 C. 1903 [1] 818).  
\*12) Formyldiphenylamin. Sm. 72,2°; Sd. 189,5—190,5°<sub>18</sub> (B. 36, 2477 C. 1903 [2] 559).  
\*20) Phenylamid d. Benzolcarbonsäure. Sm. 161° (B. 36, 135 C. 1903 [1] 507).  
29) 3-Oxy-1-Phenylimidomethylbenzol. Sm. 90,5—91° (92—93°) (A. 313, 112; D.R.P. 105006 C. 1899 [2] 1078). — \*III, 57.  
30) 3,5-Diphenylisoxazol. Sm. 142° (C. r. 137, 796 C. 1904 [1] 43).  
31)  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthen. Sm. 50—51°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 36, 122 C. 1903 [1] 470).
- $C_{18}H_{11}ON_3$  14) 2,7-Diamido-9-Oximidofluoren (D.R.P. 52596, 57394). — \*III, 177.  
15)  $\alpha$ -Oximido- $\alpha$ -Phenylazo- $\alpha$ -Phenylmethan (Phenylazobenzaldoxim). Sm. 134—135° (B. 36, 63 C. 1903 [1] 451).  
16) 4-Oximidomethylazobenzol. Sm. 143° (C. r. 135, 1117 C. 1903 [1] 286).  
17) 5-Amido-1-Oxy-2-Phenylbenzimidazol. Sm. 164° (B. 37, 2281 C. 1904 [2] 434).  
18) 6-Methyl-2-Phenyl-1,1-Dihydro-2,1,3-Benztriazol-1-Oxyd. Sm. 142,5° (B. 36, 3826 C. 1904 [1] 19).
- $C_{18}H_{11}OJ$  1)  $\alpha$ -Oxy-4-Joddiphenylmethan. Sm. 71° (A. 332, 78 C. 1904 [2] 43).  
 $C_{18}H_{11}O_2N$  \*8) 4-Nitrodiphenylmethan. Sm. 31°. + AlCl<sub>3</sub> (B. 23, 106 C. 1904 [1] 1136).  
\*15) 4-Benzoylamido-1-Oxybenzol. Sm. 212—213° (B. 37, 3941 C. 1904 [2] 1597).  
\*33) 2-Phenylamidobenzol-1-Carbonsäure. Sm. 181° (183—184°) (B. 36, 2383 C. 1903 [2] 664; D.R.P. 145189 C. 1903 [2] 1097).  
58)  $\alpha$ -Imido-2,2'-Dioxydiphenylmethan. Sm. 222° (A. 269, 321; B. 32, 1678). — III, 195; \*III, 153.  
59)  $\gamma$ -Keto- $\gamma$ -[4-Amidophenyl]- $\alpha$ -[2-Furanyl]propen. H<sub>2</sub>SO<sub>4</sub> (B. 37, 396 C. 1904 [1] 658).  
60)  $\beta$ -[4-Methyl-2-Chinoly]akrylsäure. Sm. 214° u. Zers. (2HCl, PtCl<sub>4</sub>) (B. 37, 1331 C. 1904 [1] 1360).  
61) Inn. Anhydrid d. Oxyessig-1-Methylamido-2-Naphtyläthersäure (N-Methyl- $\beta$ -Naphtomorpholon). Sm. 84—85° (Soc. 83, 1419 C. 1903 [1] 1419 C. 1903 [2] 448).  
62) 3-Amidophenylester d. Benzolcarbonsäure (A. 332, 65 C. 1904 [2] 42).
- $C_{18}H_{11}O_2N_3$  \*11) Phenylhydrazonphenylnitromethan. Sm. 101,5—102,5° (B. 36, 65 C. 1903 [1] 451).  
\*19) Benzyliden-4-Nitrophenylhydrazin. Sm. 191—192° (B. 36, 357 C. 1903 [1] 575).  
26) Phenyl-4-Nitro-2-Amidobenzylidenamin. Sm. 147° (B. 37, 1864 C. 1904 [1] 1600).  
27)  $\alpha$ -Nitroso- $\alpha\beta$ -Diphenylharnstoff. Sm. 82° u. Zers. (A. 325, 244 C. 1903 [1] 631).  
28) 2'-Nitro-2-Methylazobenzol. Sm. 108—109° (B. 36, 3818 C. 1904 [1] 18).  
29) 2-Nitro-4-Methylazobenzol. Sm. 71—71,5° (B. 36, 3821 C. 1904 [1] 18).  
30) 2'-Nitro-4-Methylazobenzol. Sm. 88° (B. 36, 3819 C. 1904 [1] 18).  
31) 6-Benzylidenhydrazidopyridin-3-Carbonsäure. Sm. 281° u. Zers. (B. 36, 1114 C. 1903 [1] 1184).  
32) Phenylamid d. 4-Oxyphenylazoameisensäure. Sm. 185—186° (A. 334, 167 C. 1904 [2] 834).
- $C_{18}H_{11}O_3N$  \*36) 4'-Nitro-4-Methyldiphenyläther. Sm. 66°; Sd. 225°<sub>25</sub> (C. 1903 [1] 634).

- $C_{15}H_{11}O_3N$  41) 4'-Nitro-2-Methyldiphenyläther. *Sd.* 220—222°<sub>77</sub> (*C.* 1903 [1] 509).  
 42) 4'-Nitro-3-Methyldiphenyläther. *Sm.* 60—61°; *Sd.* 230—233°<sub>90</sub> (*Ann.* 28, 486 *C.* 1903 [1] 327).  
 43) Phenylamid d. 3,4-Dioxybenzol-1-Carbonsäure. *Sm.* 154—156°. *Bi* (*Bl.* [3] 31, 178 *C.* 1904 [1] 869; *Bl.* [3] 31, 920 *C.* 1904 [2] 773).
- $C_{15}H_{11}O_3N_3$  \*11) 4-Nitrophenyl-2-Oxybenzylidenhydrazin. *Sm.* 225° (*R.* 22, 439 *C.* 1904 [1] 15).  
 40) 3'-Amido-4-Oxyazobenzol-3-Carbonsäure (D.R.P. 137594 *C.* 1903 [1] 113).
- $C_{15}H_{11}O_4N$  \*18) Phenylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure. *BiOH* (*Bl.* [3] 29, 532 *C.* 1903 [2] 243).  
 20) 1-Naphtylamidoessigsäure-8-Carbonsäure.  $Na_2$ ,  $Ag_2$  (*B.* 35, 4221 *C.* 1903 [1] 166).  
 21)  $\alpha$ -[2-Furanoyl]amido- $\alpha$ -Phenylessigsäure. *Sm.* 178—179° (*B.* 37, 2960 *C.* 1904 [2] 993).  
 22) Methylester d.  $\alpha$ -Cyan- $\beta$ -Acetoxy- $\beta$ -Phenylakrylsäure. *Sm.* 89° (*C. r.* 136, 690 *C.* 1903 [1] 919; *Bl.* [3] 31, 327 *C.* 1904 [1] 1135).  
 23) Methylester d.  $\alpha$ -Cyan- $\beta$ -Benzoxycrotonsäure. *Sm.* 61,5° (*C. r.* 136, 691 *C.* 1903 [1] 920).  
 24) 1-Phenylamidoformiat d. 1,2,3-Trioxybenzol. *Sm.* 141° (*B.* 37, 109 *C.* 1904 [1] 584).  
 25)  $s$ -Phenylamid d.  $\beta$ -Oxy- $\delta$ -Keto- $\beta$ -Penten- $s$ -Dicarbonsäure- $\beta$ -Lakton (*C*-Carbanilidotriacetsäurelakton). *Sm.* 156° (*B.* 37, 3391 *C.* 1904 [2] 1221).
- $C_{15}H_{11}O_4N_3$  \*4) 2-[2,4-Dinitrophenyl]amido-1-Methylbenzol. *Sm.* 120° (*J. pr.* [2] 68, 257 *C.* 1903 [2] 1064; *B.* 36, 30 *C.* 1903 [1] 520).  
 \*5) 4-[2,4-Dinitrophenyl]amido-1-Methylbenzol. *Sm.* 131° (*J. pr.* [2] 68, 256 *C.* 1903 [2] 1064).  
 \*10) 2-Nitrophenyl-4-Nitrobenzylamin. *Sm.* 138° (*R.* 21, 429 *C.* 1903 [1] 506).  
 \*11) Methyl-2,4-Dinitrodiphenylamin. *Sm.* 167° (*J. pr.* [2] 68, 255 *C.* 1903 [2] 1064).  
 \*16) 4-Nitrophenyl-4-Nitrobenzylamin. *Sm.* 192° (*R.* 21, 428 *C.* 1903 [1] 506).  
 18) 3-[2,4-Dinitrophenyl]amido-1-Methylbenzol. *Sm.* 159° (*J. pr.* [2] 68, 257 *C.* 1903 [2] 1064).  
 19) 2,4'-Dinitro-3-Methyldiphenylamin. *Sm.* 161° (*B.* 36, 31 *C.* 1903 [1] 520).
- $C_{15}H_{11}O_5N_3$  \*3) 5-[4-Nitro-2-Amidophenyl]amido-2-Oxybenzol-1-Carbonsäure. (D.R.P. 139679 *C.* 1903 [1] 748).  
 6) Methyläther d. 4,6-Dinitro-2-Oxydiphenylamin. *Sm.* 155° (*R.* 23, 114 *C.* 1904 [2] 205).  
 7) Methyläther d. 4,6-Dinitro-3-Oxydiphenylamin. *Sm.* 168° (*R.* 23, 121 *C.* 1904 [2] 206).  
 8) Nitroamidooxydiphenylamin-carbonsäure. *Na* (D.R.P. 148341 *C.* 1904 [1] 415).
- $C_{15}H_{11}O_6N_5$  3) 2,4,6-Trinitro-4'-Amido-3-Methyldiphenylamin. *Sm.* 198,5° (*B.* 37, 2096 *C.* 1904 [2] 34).  
 4) 2,4,6-Trinitro-3-Methylamidodiphenylamin. *Sm.* 174° (*R.* 21, 325 *C.* 1903 [1] 80).
- $C_{13}H_{11}NS$  \*3) Phenylamid d. Benzolthiocarbonsäure. *Sm.* 101,5—102° (*B.* 36, 587 *C.* 1903 [1] 830).  
 6) Thiobenzimidophenyläther. *Sm.* 48°. *HCl* (*B.* 36, 3465 *C.* 1903 [2] 1243).
- $C_{13}H_{11}N_2Cl$  8)  $\alpha$ -Imido- $\alpha$ -[4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. *Sm.* 115—116°. ( $2HCl$ ,  $PtCl_4$ ), ( $HCl$ ,  $AuCl_3$ ), *Pikrat* (*J. pr.* [2] 67, 450 *C.* 1903 [1] 1421).  
 9) 2-Chlorbenzylidenphenylhydrazin. *Sm.* 86° (*C.* 1903 [2] 427).
- $C_{13}H_{11}BrJ_2$  1) 3'-Brom-4-Methyldiphenyljodoniumjodid. *Sm.* 139° u. *Zers.* (*J. pr.* [2] 69, 329 *C.* 1904 [2] 36).
- $C_{13}H_{11}Br_2J$  1) 3'-Brom-2-Methyldiphenyljodoniumbromid. *Sm.* 185° (*J. pr.* [2] 69, 331 *C.* 1904 [2] 36).  
 2) 3'-Brom-4-Methyldiphenyljodoniumbromid. *Sm.* 175° (*J. pr.* [2] 69, 329 *C.* 1904 [2] 36).
- $C_{13}H_{12}ON_2$  \*2)  $s$ -Diphenylharnstoff. *Sm.* 235° (*M.* 25, 376 *C.* 1904 [2] 320).

- $C_{13}H_{12}ON_2$  \*20) 2-Oxybenzylidenphenylhydrazin. Sm. 142°; Sd. 234°<sub>28</sub> (B. 36, 580 C. 1903 [1] 709).
- \*23) 4-Oxybenzylidenphenylhydrazin. Sm. 184° (B. 36, 3974 C. 1904 [1] 163).
- \*49)  $\beta$ -Phenylhydrazid d. Benzolcarbonsäure (C. 1903 [1] 829).
- 59) 2-Oxymethylazobenzol. Sm. 77—78° (C. r. 136, 1136 C. 1903 [1] 1416).
- 60) Methyläther d. 3-Oxyazobenzol. Sm. 32,5—33,5°; Sd. 193—193,5°<sub>18</sub>. (2HCl, PtCl<sub>4</sub>) (B. 36, 4099 C. 1904 [1] 270).
- 61) Farbstoff (aus 4-Amido-1-Oxybenzol u. 2-Amido-1-Methylbenzol) (J. pr. [2] 69, 172 C. 1904 [1] 1268).
- 62) Verbindung (aus  $\alpha$ -Nitroso- $\beta$ -[2-Amidobenzoyl]- $\alpha$ -Phenylhydrazin). Sm. 206° (J. pr. [2] 69, 104 C. 1904 [1] 730).
- $C_{13}H_{12}OS$  4) 4'-Oxy-4-Methyldiphenylsulfid. Fl. (D.R.P. 147634 C. 1904 [1] 131).
- 5) Methyläther d. 4-Oxydiphenylsulfid. Sd. 180—185°<sub>12</sub> (B. 36, 109 C. 1903 [1] 454; D.R.P. 147634 C. 1904 [1] 131).
- $C_{13}H_{12}O_2N_2$  \*3) 2-Oxy-1-Phenylnitrosamidomethylbenzol. K (A. 325, 247 C. 1903 [1] 632).
- \*10) Phenyl-4-Nitrobenzylamin (Am. 30, 107 C. 1903 [2] 718).
- 53) 3,5-Diacetyl-4-Phenylpyrazol. Sm. 134° (A. 325, 186 C. 1903 [1] 647).
- 54) 3-Acetyl-5-Benzoyl-4-Methylpyrazol. Sm. 97° (A. 325, 190 C. 1903 [1] 647).
- $C_{13}H_{12}O_2N_4$  30) 6-Nitro-3-Amido-1-Phenylhydrazonmethylbenzol. Sm. 212° (M. 24, 8 C. 1903 [1] 775).
- 31) 3-Nitro-4-Amido-1-Phenylhydrazonmethylbenzol. Sm. 202° (M. 24, 93 C. 1903 [1] 921).
- 32)  $\alpha$ -Nitroso- $\beta$ -[2-Amidobenzoyl]- $\alpha$ -Phenylhydrazin. Zers. bei 78° (J. pr. [2] 69, 103 C. 1904 [1] 730).
- $C_{13}H_{12}O_2S$  \*2) Phenyl-4-Methylphenylsulfon. Sm. 124° (B. 35, 4275 Anm. C. 1903 [1] 332).
- $C_{13}H_{12}O_3N_2$  35) Äthylester d.  $\alpha$ -Cyan- $\alpha$ -Imido- $\gamma$ -Ketobutan- $\beta$ -Carbonsäure. Sm. 142,5° (A. 332, 148 C. 1904 [2] 192).
- 36) Äthylester d.  $\beta$ -Cyan- $\beta$ -Imido- $\alpha$ -Benzoylpropionsäure (Z. Kr. 33, 88). — \*II, 1174.
- 37) Benzoat d. Verbindung  $C_8H_8O_3N_2$ . Sm. 180—181° (G. 34 [1] 47 C. 1904 [1] 1150).
- $C_{13}H_{12}O_3N_4$  3) 2-Phenyl-1,2,3,4-Tetrazin-6-Dimethylmalonsäure. Sm. 163—164°. Ca, Ba (Soc. 83, 1253 C. 1903 [2] 1422).
- $C_{13}H_{12}O_3S$  5)  $\alpha$ -[1-Naphtyl]sulfon- $\beta$ -Ketopropan. Sm. 65° (J. pr. [2] 55, 415). — \*II, 509.
- 6)  $\alpha$ -[2-Naphtyl]sulfon- $\beta$ -Ketopropan. Sm. 130° (J. pr. [2] 55, 399). — \*II, 528.
- 7) Verbindung (aus  $\beta\gamma$ -Dibrompropyl-1-Naphtylsulfon). Sm. 127° (J. pr. [2] 55, 215). — \*II, 509.
- 8) Verbindung (aus  $\beta\gamma$ -Dibrompropyl-2-Naphtylsulfon). Sm. 167° (J. pr. [2] 53, 488; [2] 55, 216). — \*II, 528.
- $C_{13}H_{12}O_4N_4$  \*5) 2,2'-Dinitro-4,4'-Diamidodiphenylmethan (D.R.P. 139989 C. 1903 [1] 798).
- \*6) 4-[2,4-Dinitrophenyl]amido-2-Amido-1-Methylbenzol. Sm. 183 bis 184° (J. pr. [2] 68, 258 C. 1903 [2] 1064).
- 11) 4,6-Dinitro-4'-Amido-3-Methyldiphenylamin. Sm. 166° (B. 37, 2094 C. 1904 [2] 34).
- $C_{13}H_{12}O_4N_8$  C 45,3 — H 3,5 — O 18,6 — N 32,6 — M. G. 344.
- 1) Azid d.  $\alpha$ -Benzoylamidoacetylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 76° (J. pr. [2] 70, 177 C. 1904 [2] 1396).
- $C_{13}H_{12}O_5N_2$  2) Nitril d.  $\beta$ -Oxy- $\gamma$ -Keto- $\alpha$ -[4-Nitrophenyl]- $\beta$ -Acetylbutan- $\alpha$ -Carbonsäure. Sm. 161—162° (B. 36, 3229 C. 1903 [2] 941).
- $C_{13}H_{12}O_5N_4$  2) Säure (aus d. Verb.  $C_{15}H_{16}O_5N_4$ ) (A. 331, 313 C. 1904 [2] 46).
- $C_{13}H_{12}O_6N_2$  C 53,4 — H 4,1 — O 32,9 — N 9,6 — M. G. 292.
- 1) Äthylester d. 4,5-Diketo-2-[3-Nitrophenyl]tetrahydropyrrol-3-Carbonsäure. Zers. bei 173°.  $NH_4$  (C. r. 138, 979 C. 1904 [1] 1415).
- $C_{13}H_{12}O_6N_4$  6) Methyramidobenzol + 1,3,5-Trinitrobenzol. Sm. 81—82° (Soc. 83, 1341 C. 1904 [1] 100).

- $C_{13}H_{12}O_8N_2$  \*1) Aethylester d.  $\alpha$ -[3,5-Dinitrobenzoyl]acetessigsäure. Sm. 88—89° (*J. pr.* [2] 69, 458 *C.* 1904 [2] 595).
- $C_{13}H_{12}N_2Cl_2$  1) Di[2-Chlorphenylamido]methan. Sm. 84° (*B.* 36, 45 *C.* 1903 [1] 504).  
 2) Di[3-Chlorphenylamido]methan. Sm. 73° (*B.* 36, 46 *C.* 1903 [1] 505).  
 3) Di[4-Chlorphenylamido]methan. Sm. 65° (*B.* 36, 46 *C.* 1903 [1] 505).
- $C_{13}H_{12}N_2S$  \*1) s-Diphenylthioharnstoff. Sm. 154—155° (*B.* 36, 3846 *C.* 1904 [1] 89; *B.* 37, 158 *C.* 1904 [1] 582; *C. r.* 139, 451 *C.* 1904 [2] 1114).
- $C_{13}H_{12}N_3Cl$  8)  $\alpha$ -Phenyl- $\beta$ -[4-Chlor-2-Amidobenzyliden]hydrazin. Sm. 230° (*B.* 37, 1873 *C.* 1904 [1] 1602).
- $C_{13}H_{12}ClJ$  3) Phenyl-3-Methylphenyljodoniumchlorid. Sm. 213°. +  $HgCl_2$ , 2 +  $PtCl_4$  (*A.* 327, 276 *C.* 1903 [2] 350).
- $C_{13}H_{12}BrJ$  1) Phenyl-3-Methylphenyljodoniumbromid. Sm. 193° (*A.* 327, 276 *C.* 1903 [2] 350).
- $C_{13}H_{13}ON$  \*37) 4'-Amido-4-Methyldiphenyläther. Sm. 122°.  $HCl$ , (2 $HCl$ ,  $PtCl_4$  +  $H_2O$ ),  $HBr$  (*C.* 1903 [1] 634).  
 42) 4'-Amido-2-Methyldiphenyläther. Sm. 60°.  $HCl$ , (2 $HCl$ ,  $PtCl_4$ ),  $HBr$ ,  $H_2SO_4$  (*C.* 1903 [1] 509).  
 43) 4'-Amido-3-Methyldiphenyläther.  $HCl$  (*Am.* 28, 488 *C.* 1903 [1] 327).  
 44)  $\beta$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -[4-Pyridyl]äthan. Sm. 89—90°. (2 $HCl$ ,  $PtCl_4$ ) (*J. pr.* [2] 69, 317 *C.* 1904 [1] 1613).  
 45) N-Methyl- $\beta$ -Naphtomorpholin. Sd. 220—222°<sub>40</sub>. Camphersulfonat (*Soc.* 83, 762 *C.* 1903 [1] 1419 *C.* 1903 [2] 448).  
 46) Dimethylamid d. Naphthalin-1-Carbonsäure. Sm. 62°; Sd. 207° bis 208°<sub>15</sub> (*B.* 37, 2685 *C.* 1904 [2] 522; *B.* 37, 2817 *C.* 1904 [2] 649).
- $C_{13}H_{13}ON_3$  \*4)  $\beta$ -Phenylamido- $\alpha$ -Phenylharnstoff. Sm. 176° (*B.* 36, 1368 *C.* 1903 [1] 1342; *J. pr.* [2] 67, 263 *Anm.* *C.* 1903 [1] 1266).  
 22)  $\alpha$ -Amido- $\alpha\beta$ -Diphenylharnstoff. Sm. 165° (165,5°).  $HCl$ , (2 $HCl$ ,  $PtCl_4$ ) (*B.* 36, 1361 *C.* 1903 [1] 1340; *B.* 36, 1366 *C.* 1903 [1] 1342).  
 23)  $\alpha$ -Oximido- $\alpha$ -Amido- $\alpha$ -Diphenylamidomethan. Sm. 161°.  $HCl$ , Pikrat (*B.* 36, 3662 *C.* 1903 [2] 1325).  
 24)  $\alpha$ -Nitroso- $\alpha$ -Diphenylmethylhydrazin. Sm. 92—93° (*J. pr.* [2] 63, 136 *C.* 1903 [1] 875).  
 25) 4-Oxy-1-[2-Methylphenylamido]diazobenzol (*B.* 36, 4148 *C.* 1904 [1] 186).  
 26) 4-Oxy-1-[4-Methylphenylamido]diazobenzol. Zers. bei 63° (*B.* 36, 4147 *C.* 1904 [1] 186).  
 27) Methyläther d. 4-Amido-3-Oxyazobenzol. Sm. 110,5—111,5° (*B.* 36, 4096 *C.* 1904 [1] 270).
- $C_{13}H_{13}ON_6$  C 61,2 — H 5,1 — O 6,2 — N 27,4 — M. G. 255.  
 1) Amidd.1-[Methyl- $\alpha$ -Carboxyäthylamido]-4-Dicyanmethylenamido-benzol. Sm. 244,5° (*B.* 36, 762 *C.* 1903 [1] 963).
- $C_{13}H_{13}OJ$  3) Phenyl-3-Methylphenyljodoniumoxydhydrat. Salze siehe (*A.* 327, 274 *C.* 1903 [2] 350).
- $C_{13}H_{13}O_2N$  47) 2'-Amido-2,4-Dioxydiphenylmethan. Sm. 158—159°.  $H_2SO_4$  (*M.* 23, 985 *C.* 1903 [1] 289).  
 48) 4'-Amido-2,4-Dioxydiphenylmethan. Sm. 160—161° (*M.* 23, 979 *C.* 1903 [1] 288).  
 49)  $\alpha\beta$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthan. Sm. 144—145°.  $HCl$  + 2 $H_2O$ , (2 $HCl$ ,  $PtCl_4$ ), Pikrat (*B.* 36, 120 *C.* 1903 [1] 470).  
 50) 8-Acetyl-1,2,3,4-Tetrahydronaphtostyrol. Sm. 103—104° (*B.* 35, 4224 *C.* 1903 [1] 166).  
 51) 1,2,3,4-Tetrahydrocarbazol-3-Carbonsäure (*Soc.* 85, 428 *C.* 1904 [1] 1439).  
 52) Phenylimid d.  $\beta$ -Penten- $\beta\gamma$ -Dicarbonsäure. Sd. 184°<sub>14</sub> (*B.* 37, 1617 *C.* 1904 [1] 1403).
- $C_{13}H_{13}O_2N_3$  12) 2-Nitro-4,4'-Diamidodiphenylmethan. Sm. 100—101° (*D.R.P.* 139989 *C.* 1903 [1] 798).  
 13)  $\beta$ -[4-Oxyphenyl]amido- $\alpha$ -Phenylharnstoff. Sm. 207° u. Zers. (*A.* 334, 169 *C.* 1904 [2] 834).  
 14) s-Dioxydiphenylguanidin. Sm. 135° u. Zers. (*B.* 37, 1539 *C.* 1904 [1] 1411).
- $C_{13}H_{13}O_5N$  \*22) Aethylester d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\beta$ -Phenylakrylmethyläthersäure. Sm. 101,5° (*C. r.* 136, 691 *C.* 1903 [1] 920).

- $C_{13}H_{13}O_3N$  28) 2'-Amido-2,4,6-Trioxydiphenylmethan. HCl (*M.* 23, 986 *C.* 1903 [1] 289).
- $C_{13}H_{13}O_3N_3$  \*5) Aethylester d. Acetylphenylhydrazoncyanessigsäure.  $\alpha$ -Modif. Sm. 158°;  $\beta$ -Modif. Sm. 166° (*J. pr.* [2] 67, 403 *C.* 1903 [1] 1346).
- 11) 1-Semicarbazon-3-Methylinden-2-Methylcarbonsäure. Sm. 218 bis 219° u. Zers. (*B.* 37, 1621 *C.* 1904 [1] 1419).
- 12) Laktone d. 3-Semicarbazon-1-Oxy-1-Methyl-2,3-Dihydroinden-2-Methylcarbonsäure. Sm. 258—259° u. Zers. (*B.* 37, 1622 *C.* 1904 [1] 1419).
- 13) Phenylamidoformiat d. Verb.  $C_6H_5O_2N_2$ . Sm. 178—180° (*G.* 34 [1] 48 *C.* 1904 [1] 1150).
- $C_{13}H_{13}O_3P$  5) Säure (aus Diphenylketon). Sm. 150—151°. Pb, Ag (*C. r.* 136, 509 *C.* 1903 [1] 773).
- $C_{13}H_{13}O_4N$  \*15) Aethylester d.  $\alpha$ -Phtalylamidopropionsäure. Sm. 65° (*M.* 25, 774 *C.* 1904 [2] 1121).
- 21) Aethylester d. 4,5-Diketo-2-Phenyltetrahydropyrrol-3-Carbonsäure. Zers. bei 185°.  $NH_4$ , K, Cu +  $2C_2H_4O_2$ , Ag (*C. r.* 138, 977 *C.* 1904 [1] 1415).
- $C_{13}H_{13}O_4N_3$  4) Acetat d. 4-[ $\beta$ -Oximido- $\beta$ -Phenyläthyl]-1,2,3,6-Dioxdiazin. Sm. 146—147° (*A.* 330, 245 *C.* 1904 [1] 946).
- $C_{13}H_{13}O_4P$  1) Säure (aus d. Säure  $C_{13}H_{13}O_3P$ ). Sm. 184—185° (*C. r.* 136, 509 *C.* 1903 [1] 773).
- $C_{13}H_{13}O_5N$  \*2) Aethylester d.  $\gamma$ -Keto- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 110° (*Soc.* 83, 719 *C.* 1903 [2] 54).
- 8)  $\alpha$ -[4-Aethoxyphtalyl]amidopropionsäure. Sm. 146° (*B.* 37, 1978 *C.* 1904 [2] 236).
- 9) Aethylester d. 4,5-Diketo-2-[2-Oxyphenyl]tetrahydropyrrol-3-Carbonsäure. Zers. bei 175°.  $NH_4$  (*C. r.* 138, 979 *C.* 1904 [1] 1415).
- $C_{13}H_{13}O_5N_3$  C 53,6 — H 4,5 — O 27,5 — N 14,4 — M. G. 291.
- 1)  $\beta$ -Acetat d. 4-[ $\beta$ -Oximido- $\beta$ -4-Oxyphenyläthyl]-1,2,3,6-Dioxdiazin-4-Methyläther. Sm. 168—169° (*A.* 330, 243 *C.* 1904 [1] 945).
- $C_{13}H_{13}O_6N$  \*2) Aethylester d. 2-Nitrobenzoylacetessigsäure (*Soc.* 85, 151 *C.* 1904 [1] 724).
- $C_{13}H_{13}O_7N$  \*2) Acetonylnitromekonin (*B.* 36, 2208 *C.* 1903 [2] 443).
- $C_{13}H_{13}O_8N$  C 50,2 — H 4,2 — O 41,1 — N 4,5 — M. G. 311.
- 1) Triacetat d. 3-Nitro-2-Oxy-1-Dioxymethylbenzol. Sm. 110° (*B.* 20, 2110; *B.* 37, 3931 *C.* 1904 [2] 1595). — III, 70.
- 2) Triacetat d. 5-Nitro-2-Oxy-1-Dioxymethylbenzol. Sm. 112° (114—115°) (*B.* 20, 2110; *B.* 37, 3931 *C.* 1904 [2] 1595). — III, 70.
- $C_{13}H_{13}NS$  \*1) 4-Amido-4-Methyldiphenylsulfid. Sm. 72°; Sd. 365° u. ger. Zers. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Oxalat (*J. pr.* [2] 68, 265 *C.* 1903 [2] 992).
- $C_{13}H_{13}N_3S$  \*5)  $\alpha$ -Amido- $\alpha$ - $\beta$ -Diphenylthioharnstoff. HCl (*B.* 37, 2331 *C.* 1904 [2] 313).
- $C_{13}H_{14}ON_2$  \*1)  $\alpha$ -Oxy- $\beta$ -Diamidodiphenylmethan (*C.* 1903 [2] 442).
- \*8) Methyläther d. 4,4'-Diamido-2-Oxybiphenyl. Sm. 103—103,5°. 2HCl, Pikrat (*B.* 36, 4076 *C.* 1904 [1] 267).
- 38) 4-Amido-4'-Oxy-3-Methyldiphenylamin. Sm. 160° (*D.R.P.* 139204 *C.* 1903 [1] 608; *J. pr.* [2] 69, 173 *C.* 1904 [1] 1268).
- 39) 1-Benzoylamido-2,5-Dimethylpyrrol. Sm. 177—179° (*B.* 35, 4319 *C.* 1903 [1] 336).
- $C_{13}H_{14}ON_4$  7) 3,4,3',4'-Tetraamidodiphenylketon. Sm. 155° (*G.* 34 [1] 380 *C.* 1904 [2] 111).
- 8) Methyloxyhydrat d. 2,3-Diamido-5,10-Naphtdiazin. Nitrat (*A.* 327, 119 *C.* 1903 [1] 1214).
- $C_{13}H_{14}O_2N_2$  34) Säure (aus Diacetopropionsäureäthylester u. essigsäurem Phenylhydrazin). Sm. 210° u. Zers. Ag + H<sub>2</sub>O (*B.* 37, 2194 *C.* 1904 [2] 240).
- 35) Aethylester d.  $\alpha$ -Cyan- $\beta$ -Aethylamido- $\beta$ -Phenylakrylsäure. Sm. 123° (*C. r.* 136, 691 *C.* 1903 [1] 920).
- 36) Aethylester d.  $\alpha$ -Cyan- $\beta$ -Methylamido- $\beta$ -Phenylakrylsäure. Sm. 104 bis 105° (*Bl.* [3] 31, 343 *C.* 1904 [1] 1135).
- $C_{13}H_{14}O_3N_2$  24) 3-Cyanphenylmonamid d. Bernsteinsäuremonoäthylester. Sm. 84 bis 84,5° (*C.* 1904 [2] 103).

- $C_{13}H_{14}O_3N_4$  C 56,9 — H 5,1 — O 17,5 — N 20,4 — M. G. 274.  
 1) Methylester d. 5-Acetylamido-1-Phenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 81° (B. 35, 4059 C. 1903 [1] 171).
- $C_{13}H_{14}O_4N_2$  7) Cinnamoylamidoacetylamidoessigsäure. Sm. 229—230° (B. 37, 3067 C. 1904 [2] 1207).  
 8) Aethylester d. 2,5-Diketo-1-Phenyltetrahydroimidazol-4-Methylcarbonsäure. Sm. 122° (B. 36, 3342 C. 1903 [2] 1175).
- $C_{13}H_{14}O_4N_6$  \*1) Azid d. Benzoylbis[Amidoacetyl]amidoessigsäure. Sm. 162° (J. pr. [2] 70, 84 C. 1904 [2] 1033).
- $C_{13}H_{14}O_6N_2$  C 53,1 — H 4,8 — O 32,6 — N 9,5 — M. G. 294.  
 1)  $\alpha$ -Benzoylamidoacetylamidoäthan- $\alpha\beta$ -Dicarbonsäure (Hippurylasparaginsäure). Sm. 191°.  $(NH_4)_2$ , Ba, Cu + 3H<sub>2</sub>O, Ag<sub>2</sub> (J. pr. [2] 70, 168 C. 1904 [2] 1396).
- $C_{13}H_{14}O_7N_2$  C 50,3 — H 4,5 — O 36,1 — N 9,0 — M. G. 310.  
 1) Lakton d.  $\gamma$ -Oximido- $\alpha$ -Oxy- $\alpha$ -[6-Nitro-3,4-Dimethoxyphenyl]-butan-2-Carbonsäure (Oxim d. Acetonylnitromekonin). Sm. 170° (B. 36, 2209 C. 1903 [2] 443).
- $C_{13}H_{14}N_2Br_2$  1) 2-Bromallylat d. 5-Brom-3-Methyl-1-Phenylpyrazol. Sm. 196° (A. 331, 211 C. 1904 [1] 1219).
- $C_{13}H_{14}N_2J_2$  1) 2-Jodallylat d. 5-Jod-3-Methyl-1-Phenylpyrazol. Sm. 203° (A. 331, 212 C. 1904 [1] 1219).
- $C_{13}H_{14}N_2S$  2) Allyläther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sm. 56—57°; Sd. 184—188°<sub>11</sub> (A. 331, 237 C. 1904 [1] 1221).  
 3) 3-Thiocarbonyl-5-Methyl-1-Allyl-2-Phenyl-2,3-Dihydropyrazol (Allylthiopyrin). Sm. 123° (A. 331, 213 C. 1904 [1] 1219).
- $C_{13}H_{15}ON$  20) 2-Methyläthylamido-1-Oxynaphtalin. Sm. 25—27°; Sd. 193°<sub>40</sub>. HJ, Camphersulfonat + H<sub>2</sub>O (Soc. 83, 761 C. 1903 [1] 1419 C. 1903 [2] 448).  
 21) 3-Keto-1-Isoamylpseudoisocindol. Sm. 115° (C. r. 138, 988 C. 1904 [1] 1446).
- $C_{13}H_{15}ON_8$  3)  $\varepsilon$ -Semicarbazon- $\alpha$ -Phenyl- $\alpha\gamma$ -Hexadiën. Sm. 186° (B. 36, 4381 C. 1904 [1] 455).
- $C_{13}H_{15}O_2N$  \*16) Phenylimid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 207° (Bl. [3] 29, 1019 C. 1903 [2] 1315).  
 \*22) Phenylimid d.  $\beta$ -Methylbutan- $\gamma\delta$ -Dicarbonsäure. Sm. 88° (B. 36, 1751 C. 1903 [2] 117).  
 41)  $\delta$ -Oximido- $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl] $\alpha$ -Buten. Sm. 162—163° (C. 1904 [1] 28; A. 330, 254 C. 1904 [1] 946).  
 42) 2-Keto-1-Acetyl-3-Isopropyl-2,3-Dihydroindol. Sm. 104° (M. 24, 574 C. 1903 [2] 887).  
 43) 4-Methyl-2-[ $\beta\beta$ -Dioxyisopropyl]chinolin. Sm. 140°. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (B. 37, 1329 C. 1904 [1] 1360).  
 44) 4-Oxy-1-Keto-3-Isobutyl-1,2-Dihydroisochinolin. Sm. 171—173° (B. 37, 1695 C. 1904 [1] 1525).  
 45) Aethyläther d. 6-Oxy-2-Keto-1-Aethyl-1,2-Dihydrochinolin. Sm. 84° (B. 36, 458 C. 1903 [1] 590).  
 46) d-sec. Amylimid d. Benzol-1,2-Dicarbonsäure. Sm. 23°; Sd. 303° (B. 37, 1047 C. 1904 [1] 1249).  
 47) Benzoat d. d-3-Oximido-1-Methyl-R-Pentamethylen. Sm. 60—61° (A. 332, 349 C. 1904 [2] 653).  
 48) Isoamylimid d. Benzol-1,2-Dicarbonsäure. Sm. 12,5°; Sd. 307 bis 308° (B. 23, 998; B. 37, 1047 C. 1904 [1] 1249). — II, 1804.
- $C_{13}H_{15}O_2N_3$  \*10) Aethylester d. 2,4-Dimethylphenylhydrazoncyanessigsäure. Sm. 166° (J. pr. [2] 67, 409 C. 1903 [1] 1347).  
 15) Acetat d. 5-Oxy-3-Propyl-1-Phenyl-1,2,4-Triazol. Sm. 84° (B. 36, 1099 C. 1903 [1] 1140).  
 16) Nitril d. 2,6-Diketo-4-Hexyl-1,2,3,6-Tetrahydropyridin-3,5-Dicarbonsäure. NH<sub>4</sub>, Nikotinsalz (C. 1903 [2] 193).  
 17) Verbindung (aus Benzylidenacetylaceton u. Semicarbazid). Sm. 210° u. Zers. (Soc. 85, 467 C. 1904 [1] 1080, 1438).
- $C_{13}H_{15}O_2Cl$  1) Aethylester d.  $\beta$ -Chlor- $\alpha$ -Phenyl- $\beta$ -Buten- $\alpha$ -Carbonsäure. Sd. 159 bis 161°<sub>18</sub> (B. 36, 2245 C. 1903 [2] 435).
- $C_{13}H_{15}O_3N$  20) Dimethyläther d. 6,7-Dioxy-1-Keto-2-Aethyl-1,2-Dihydroisochinolin. Sm. 60—62°. HCl (B. 37, 3402 C. 1904 [2] 1318).

- $C_{13}H_{15}O_3N$  21) 8-Acetylamido-1,2,3,4-Tetrahydronaphthalin-1-Carbonsäure. Sm. 181—182° (*B.* 35, 4224 *C.* 1903 [1] 166).  
 22)  $\gamma$ -Phenylamid d.  $\beta$ -Oxy- $\beta$ -Methylbutan- $\gamma\delta$ -Dicarbonsäure- $\beta\delta$ -Lakton. Sm. 176° (*C. r.* 139, 293 *C.* 1904 [2] 692).  
 23)  $\alpha$ -Phenylmonamid d. cis- $\gamma$ -Methyl- $\alpha$ -Buten- $\alpha\gamma$ -Dicarbonsäure. Sm. 162° (164° u. Zers.) (*C. r.* 136, 382 *C.* 1903 [1] 697; *Soc.* 83, 15 *C.* 1903 [1] 443).  
 24) 4-Methylphenylmonamid d.  $\alpha$ -Buten- $\beta\delta$ -Dicarbonsäure. Sm. 154 bis 155° (*B.* 36, 1203 *C.* 1903 [1] 1175).  
 25) 4-Aethoxylphenylimid d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 97° (*G.* 34 [2] 272 *C.* 1904 [2] 1454).
- $C_{13}H_{15}O_3N_3$  5) 4- $[\beta$ -Oximido- $\beta$ -4-Isopropylphenyläthyl]-1,2,3,6-Dioxidiazin. Sm. 187° (*A.* 330, 244 *C.* 1904 [1] 946).  
 6) Verbindung (aus Dicyanbenzoylessigsäureäthylester). Sm. 176° (*A.* 332, 150 *C.* 1904 [2] 192).  
 C 54,0 — H 5,2 — O 16,6 — N 24,2 — M. G. 289.
- $C_{13}H_{15}O_3N_5$  1) Azid d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Zers. bei 73° (*J. pr.* [2] 70, 212 *C.* 1904 [2] 1460).  
 2) Azid d.  $\alpha$ -[ $\alpha$ -Benzoylamidopropionyl]amidopropionsäure (*J. pr.* [2] 70, 151 *C.* 1904 [2] 1394).
- $C_{13}H_{15}O_4N$  17) Dimethylester d. cis-1-[ $p$ -Amidophenyl]-*R*-Trimethylen-trans-2,3-Dicarbonsäure. HCl (*B.* 36, 3781 *C.* 1904 [1] 42).
- $C_{13}H_{15}O_4N_7$  C 46,8 — H 4,5 — O 19,2 — N 29,4 — M. G. 333.  
 1) Azid d.  $\beta$ -Phenylureidoacetylamidoacetylamidoessigsäure. (*J. pr.* [2] 70, 262 *C.* 1904 [2] 1465).
- $C_{13}H_{15}O_5N$  17)  $\alpha$ -Benzoylamidobutan- $\alpha\delta$ -Dicarbonsäure (*C.* 1903 [2] 34).  
 18) Diäthylester d. Phenylamin-*N*-Carbonsäure-*N*-Ketocarbonsäure. Sm. 68°; Sd. 188—190°<sub>8-9</sub> (*B.* 37, 3683 *C.* 1904 [2] 1495).  
 19)  $\beta$ -Benzylamid d. i- $\alpha$ -Acetoxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 111° (*B.* 37, 2126 *C.* 1904 [2] 439).
- $C_{13}H_{15}O_5N_3$  \*7) Benzoylbis[Amidoacetyl]amidoessigsäure. Sm. 215—216°. Ag (*J. pr.* [2] 70, 81 *C.* 1904 [2] 1033).
- $C_{13}H_{15}O_5Br$  1) Phenolbromglykosid. Sm. 170—180° (*C.* 1903 [2] 1446).
- $C_{13}H_{15}O_5N$  11) Methylester d.  $\beta$ -Nitro- $\gamma$ -Acetoxy- $\gamma$ -Phenylbuttersäure. Sm. 89° (*A.* 329, 253 *C.* 1904 [1] 31).  
 12) Dimethylester d. Iso- $\beta$ -[2-Nitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 65,5° (*B.* 36, 2673 *C.* 1903 [2] 948).
- $C_{13}H_{15}N_2Br$  1) Brom-4-Dimethylamidophenylat d. Pyridin (*J. pr.* [2] 70, 51 *C.* 1904 [2] 1236).
- $C_{13}H_{15}ON_2$  \*15) 5-Keto-4-Methyl-3-Propyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 100° (*Bl.* [3] 27, 1102 *C.* 1903 [1] 227).  
 19) 4-Dimethylamidophenylhydroxyd d. Pyridin. Salze siehe (*J. pr.* [2] 70, 51 *C.* 1904 [2] 1236).  
 20) Nitril d.  $\alpha$ -[2-Oxyphenyl]- $\alpha$ -[1-Piperidyl]essigsäure. Sm. 89—90° (*B.* 37, 4086 *C.* 1904 [2] 1724).
- $C_{13}H_{15}O_2N_2$  24)  $\gamma\delta$ -Dioximido- $\alpha$ -[4-Isopropylphenyl] $\alpha$ -Buten. Sm. 192° u. Zers. (*C.* 1904 [1] 28; *A.* 330, 255 *C.* 1904 [1] 946).  
 25) Phenylhydantoïn d. d-Isoleucin. Sm. 78—79° (*B.* 37, 1830 *C.* 1904 [1] 1645).  
 26) Nitril d.  $\alpha$ -Diäthylamido- $\alpha$ -[3,4-Dioxyphenyl]essig-3,4-Methylenäthersäure. Sm. 43—44°; Sd. 179,5°<sub>12,5</sub> (*B.* 37, 4091 *C.* 1904 [2] 1725).  
 27) Amid d.  $\alpha$ -Cyan- $\beta$ -[4-Isopropylphenyl]propionsäure. Sm. 144° (*A.* 325, 217 *C.* 1903 [1] 439).
- $C_{13}H_{15}O_2N_4$  2) Amid d. 3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyridin-4-Amidoessigsäure. Sm. 194—195° (*Bl.* [3] 29, 967 *C.* 1903 [2] 1118).
- $C_{13}H_{15}O_2Br_2$  2) Isobutylester d.  $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Sm. 59—60° (*Soc.* 83, 677 *C.* 1903 [2] 115).
- $C_{13}H_{15}O_2N_2$  \*13) Phenylmonamid d.  $\beta$ -Imidopropan- $\alpha\alpha$ -Dicarbonsäuremonoäthylester. Sm. 125—126° (*A.* 329, 345 *C.* 1904 [1] 435).  
 16) 3-Nitro-4-Methylphenylamid d.  $\alpha$ -Penten- $\alpha$ -Carbonsäure. Sm. 87° (*B.* 37, 2000 *C.* 1904 [2] 24).  
 17) Verbindung (aus Oxybenzol u. Harnstoff). Sm. 61° (*J.* 1886, 548). — II, 651.

- $C_{13}H_{16}O_4N_2$  \*5) Aethylester d. Benzoylamidoacetylamidoessigsäure. Sm. 117° (*J. pr.* [2] 70, 77 *C.* 1904 [2] 1033; *J. pr.* [2] 70, 194 *C.* 1904 [2] 1398).
- 11)  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 122°.  $NH_4$ , Ag (*J. pr.* [2] 70, 205 *C.* 1904 [2] 1459).
- 12)  $\gamma$ -Benzoylamidoacetylamidobuttersäure. Sm. 176°.  $NH_4$ , Ag (*J. pr.* [2] 70, 225 *C.* 1904 [2] 1461).
- 13)  $\alpha$ -[ $\alpha$ -Benzoylamidopropionyl]amidopropionsäure. Sm. 170–171° (*J. pr.* [2] 70, 148 *C.* 1904 [2] 1394).
- 14) Methylester d.  $\alpha$ -Benzoylamidoacetylamidopropionsäure. Sm. 136° (*J. pr.* [2] 70, 117 *C.* 1904 [2] 1036).
- 15) Dimethylester d. 2,4-Dimethylphenylhydrazonmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 93° (*B.* 37, 4179 *C.* 1904 [2] 1705).
- $C_{13}H_{16}O_4N_4$  2) Nitril d. 6-Oxy-2-Keto-4-[3-Nitrophenyl]-2,5-Dihydropyridin-3,5-Dicarbonsäure. Zers. bei 260°.  $NH_4$ , Ba + 7H<sub>2</sub>O, (Cu + 1½NH<sub>3</sub> + 1½H<sub>2</sub>O), Ag + 4H<sub>2</sub>O (*C.* 1904 [1] 877).
- 3) Amid d.  $\alpha$ -Benzoylamidoacetylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 223° u. Zers. (*J. pr.* [2] 70, 179 *C.* 1904 [2] 1396).
- 4) Verbindung (aus Dicyanbenzoylessigsäureäthylester). Sm. 155° u. Zers. (*A.* 332, 152 *C.* 1904 [2] 192).
- $C_{13}H_{16}O_4Br_2$  4) Aethylester d.  $\alpha\beta$ -Dibrom- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Dimethyläthersäure. Sm. 111° (*C.* 1903 [1] 580; *Soc.* 85, 164 *C.* 1904 [1] 724).
- $C_{13}H_{16}O_4S$  2) 5-Keto-3-Phenyl-1-Methylhexahydrobenzol-3-Sulfonsäure. Ba (*B.* 37, 4041 *C.* 1904 [2] 1647).
- $C_{13}H_{16}O_4S_2$  1) 2,4-Di[Allylsulfon]-1-Methylbenzol. Sm. 89–90° (*J. pr.* [2] 68, 336 *C.* 1903 [2] 1172).
- $C_{13}H_{16}O_5N_2$  \*7) Inn. Anhydrid d. d-Phenylamidoformylglykosamin. Sm. 210–211° (*B.* 36, 29 *C.* 1903 [1] 446).
- \*8)  $\epsilon$ -Lakton d. Glyazindihydrotetramethylimalonsäuremethylester. Sm. 177° (*Soc.* 83, 1257 *C.* 1903 [2] 1423).
- $C_{13}H_{16}O_5N_4$  C 50,6 — H 5,2 — O 26,0 — N 18,2 — M. G. 308.
- 1)  $\beta$ -Phenylureidoacetylamidoacetylamidoessigsäure. Sm. 184° (*J. pr.* [2] 70, 259 *C.* 1904 [2] 1465).
- $C_{13}H_{16}O_5S_2$  \*1) Aethylester d.  $\alpha$ -[4-Methylphenylthiosulfon]acetessigsäure. Sm. 62° (*J. pr.* [2] 70, 376 *C.* 1904 [2] 1719).
- 2) Aethylester d.  $\alpha$ -[2-Methylphenylthiosulfon]acetessigsäure. Fl. (*J. pr.* [2] 70, 382 *C.* 1904 [2] 1719).
- $C_{13}H_{16}O_6N_2$  5) d-Phenylamidoformylglykosaminsäure (Tetraoxybutyl-N-Phenylhydantoin). Sm. 199–201° (*B.* 35, 4013 *C.* 1903 [1] 390).
- 6)  $\alpha\gamma$ -Laktam d.  $\beta\gamma$ -Diimido- $\epsilon$ -Ketohehexan- $\alpha\alpha\delta$ -Tricarbonsäure- $\alpha\delta$ -Diäthylester. Sm. 103–137° (*A.* 332, 129 *C.* 1904 [2] 189).
- $C_{13}H_{16}O_6S_2$  1) 2,4-Di[Acetonylsulfon]-1-Methylbenzol. Sm. 127° (*J. pr.* [2] 68, 337 *C.* 1903 [2] 1172).
- 2) Aethylester d.  $\alpha$ -[4-Methoxyphenylthiosulfon]acetessigsäure. Fl. (*J. pr.* [2] 70, 390 *C.* 1904 [2] 1721).
- $C_{13}H_{16}N_2S$  2) Aethyläther d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol. Sd. 316–318° (*A.* 331, 244 *C.* 1904 [1] 1221).
- 3) Isopropyläther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sd. 309 bis 310° (*A.* 331, 235 *C.* 1904 [1] 1221).
- $C_{13}H_{17}ON$  \*5)  $\alpha$ -Oximidobenzylhexahydrobenzol. Sm. 157° (*C. r.* 139, 345 *C.* 1904 [2] 705).
- 25) Methyläther d. 4-[4-Oxybenzoyl]methyl-1,2,3,6-Dioxdiazin. Sm. 159–160° (*A.* 330, 244 *C.* 1904 [1] 945).
- 26) Nitril d. 3-Oxy-*p*-tert. Butyl-1-Methylbenzol-*p*-Carbonsäure. Sm. 117° (*D.R.P.* 84336). — \*II, 938.
- 27) 4-Methylphenylamid d.  $\alpha$ -Penten- $\alpha$ -Carbonsäure. Sm. 125°; Sd. 205 bis 215°<sub>13</sub> (*B.* 37, 2000 *C.* 1904 [2] 24).
- 28) 4-Methylphenylamid d.  $\alpha$ -Penten- $\epsilon$ -Carbonsäure. Sm. 75°; Sd. 220°<sub>14</sub> (*B.* 37, 2000 *C.* 1904 [2] 24).
- 29) 4-Methylphenylamid d.  $\beta$ -Penten- $\alpha$ -Carbonsäure. Sm. 95,5° (*B.* 37, 2000 *C.* 1904 [2] 24).
- 30) 4-Methylphenylamid d.  $\beta$ -Penten- $\epsilon$ -Carbonsäure. Sm. 103°; Sd. 200 bis 205°<sub>12</sub> (*B.* 37, 2000 *C.* 1904 [2] 24).

- $C_{18}H_{17}ON_3$  \*2) 4-Dimethylamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol (*C.* 1897 [1] 1006; D.R.P. 144393 *C.* 1903 [2] 777; D.R.P. 145603 *C.* 1903 [2] 1225).
- \*6)  $\gamma$ -Semicarbazon- $\alpha$ -Phenyl- $\delta$ -Methyl- $\alpha$ -Penten. Sm. 166—167° (*Soe.* 81, 1489 *C.* 1903 [1] 133).
- 8) Isopropylidenhydrazid d. 2-Isopropylidenamidobenzol-1-Carbonsäure. Sm. 244° (*J. pr.* [2] 69, 98 *C.* 1904 [1] 730).
- $C_{13}H_{17}OCl$  2) Hydrochlorid d. Benzalpinakolin. Sm. 33—34° (*B.* 36, 1480; *B.* 36, 3535 *C.* 1903 [2] 1368).
- $C_{18}H_{17}OBr$  1) Hydrobromid d. Benzalpinakolin. Sm. 44° (*B.* 36, 3534 *C.* 1903 [2] 1368).
- $C_{18}H_{17}O_2N$  24) Methyläther d. 1-[4-Oxybenzoyl]hexahydropyridin. Sd. 220—222°<sub>14</sub> (*B.* 36, 3525 *C.* 1903 [2] 1326).
- 25) Aethylester d. 1,2,3,4-Tetrahydroisochinolin-2-Methylcarbon-säure. Sd. 184—185°<sub>18</sub> (*B.* 36, 1161 *C.* 1903 [1] 1186).
- 26) Phenylamidoformiat d. Oxyhexahydrobenzol. Sm. 82,5° (*Bl.* [3] 29, 1052 *C.* 1903 [2] 1437).
- $C_{18}H_{17}O_2N_3$  8) Isopropylidenhydrazid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 157,5° (*J. pr.* [2] 70, 144 *C.* 1904 [2] 1394).
- $C_{18}H_{17}O_8N$  \*27) Phenylmonamid d. mal. Pentan- $\beta$ - $\delta$ -Dicarbonsäure. Sm. 155—156° (*Bl.* [3] 29, 1019 *C.* 1903 [2] 1315).
- \*29) Phenylmonamid d. cis- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 149° (147°) (*Soe.* 83, 358 *C.* 1903 [1] 389, 1122; *C. r.* 136, 243 *C.* 1903 [1] 565).
- \*42) r- $\alpha$ -Benzoylamido- $\gamma$ -Methylvaleriansäure. Sm. 139—140° (*Bl.* [3] 31, 1182 *C.* 1904 [2] 1710).
- \*58) Phenylmonamid d.  $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 100 bis 103° (*C.* 1903 [2] 288).
- 62)  $\alpha$ -Methylhydrocotarnin. Fl. (2HCl, PtCl<sub>4</sub>), HBr, HJ, H<sub>2</sub>SO<sub>4</sub> (*B.* 36, 4258 *C.* 1904 [1] 382).
- 63) Benzoyl-d-Isoleucin. Sm. 116—117° (*B.* 37, 1827 *C.* 1904 [1] 1645).
- 64) Aethylester d. 4-Methylphenylimidooxyessigäthyläthersäure. Sd. 160—162°<sub>14-15</sub> (*Soe.* 85, 989 *C.* 1904 [2] 830).
- 65) d-sec. Amylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 123° (*B.* 37, 1048 *C.* 1904 [1] 1249).
- 66) norm. Propylester d. Phenylacetylamidoessigsäure. Sm. 31° (*J. pr.* [2] 38, 106). — II, 1313.
- 67) isom. Phenylmonamid d. cis- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 127° (*Bl.* [3] 29, 336 *C.* 1903 [1] 1216).
- $C_{18}H_{17}O_8N_3$  4)  $\alpha$ -Phenylpropylester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 143° (*C. r.* 138, 985 *C.* 1904 [1] 1398).
- 5) Amid d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 173° (*J. pr.* [2] 70, 213 *C.* 1904 [2] 1460).
- 6) 2-Nitro-4-Methylphenylamid d. Hexahydropyridin-1-Carbonsäure. Sm. 152° (*Bl.* [3] 31, 23 *C.* 1904 [1] 521).
- $C_{18}H_{17}O_3Br_3$  1)  $\alpha$ ,3-Dimethyläther-4-Aethyläther d. 2,5-Dibrom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 63—64° (*B.* 37, 1132 *C.* 1904 [1] 1261).
- $C_{18}H_{17}O_4N$  26) 2,4,5-Trimethyläther d.  $\gamma$ -Oximido- $\alpha$ -[2,4,5-Trioxyphenyl]butan. Sm. 145° (*Ar.* 242, 102 *C.* 1904 [1] 1006).
- 27)  $\alpha$ -Phenylamidoformoxyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm. 114 bis 115° (*Bl.* [3] 31, 322 *C.* 1904 [1] 1134).
- 28) 4-Aethoxylphenylamid d.  $\alpha$ -Acetoxylpropionsäure. Sm. 129° (*B.* 37, 3974 *C.* 1904 [2] 1605).
- $C_{18}H_{17}O_4N_3$  6)  $\delta$ -[4-Nitrophenyl]hydrazon- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 190° (*Soe.* 85, 1221 *C.* 1904 [2] 1108).
- 7)  $\alpha$ -Bisamidoacetylamido- $\beta$ -Phenylpropionsäure. Sm. 238—239° (*B.* 37, 3315 *C.* 1904 [2] 1307).
- 8)  $\alpha$ -Amido- $\beta$ -Phenylpropionylamidoacetylamidoessigsäure. Sm. 235° u. Zers. (*B.* 37, 3066 *C.* 1904 [2] 1207).
- 9) Aethylester d.  $\beta$ -Phenylureidoacetylamidoessigsäure. Sm. 165° (*J. pr.* [2] 70, 252 *C.* 1904 [2] 1464).
- 10) Aethylester d. Benzoylamidoacetylamidomethylamidoameisen-säure. Sm. 200° (*J. pr.* [2] 70, 80 *C.* 1904 [2] 1033).

- $C_{13}H_{17}O_4N_5$  \*1) Hydrazid d. Benzoylbis[Amidoacetyl]amidoessigsäure. Sm. 245 bis 250° u. Zers. (*J. pr.* [2] 70, 83 *C.* 1904 [2] 1033).
- $C_{13}H_{17}O_4J$  2) Diacetat d. 4-Jodoso-1-Propylbenzol. Sm. 101° (*A.* 327, 305 *C.* 1903 [2] 353).
- 3) Diacetat d. 4-Jodoso-3-Aethyl-1-Methylbenzol (*J. pr.* [2] 69, 438 *C.* 1904 [2] 589).
- $C_{13}H_{17}O_5N_3$  5) Oxim d. Glyazindihydrotetramethylimalonsäuremethylester- $\delta$ -Lakton. Sm. 136° (*Soc.* 83, 1258 *C.* 1903 [2] 1423).
- $C_{13}H_{17}O_5N$  2) 3-Nitrobenzylidendulcit. Sm. 256,5° (*Bl.* [3] 29, 506 *C.* 1903 [2] 237).
- 3) 4-Nitrobenzylidendulcit. Sm. 186° (*Bl.* [3] 29, 506 *C.* 1903 [2] 237).
- 4) 2-Nitrobenzyliden-d-Mannit. Sm. 214° (*R.* 19, 179). — \*III, 9.
- 5) 3-Nitrobenzyliden-d-Mannit. Sm. 247° (*R.* 19, 179). — \*III, 10.
- 6) 4-Nitrobenzyliden-d-Mannit. Sm. 162° (198,5°) (*R.* 19, 179; *Bl.* [3] 29, 504 *C.* 1903 [2] 237). — \*III, 10.
- 7) 4-Nitrobenzyliden-d-Sorbit. Sm. 150° (204,5°) (*R.* 19, 179; *Bl.* [3] 29, 505 *C.* 1903 [2] 237). — \*III, 10.
- $C_{13}H_{18}ON_2$  17) Nitril d.  $\alpha$ -Diäthylamido- $\alpha$ -[4-Oxyphenyl]essigmethyläthersäure. Sm. 44°; Sd. 166°<sub>11</sub> (*B.* 37, 4090 *C.* 1904 [2] 1725).
- 18) 2-Methylphenylamid d. Hexahydropyridin-1-Carbonsäure. Sm. 113° (*Bl.* [3] 29, 410 *C.* 1903 [1] 1363).
- 19) 4-Methylphenylamid d. Hexahydropyridin-1-Carbonsäure. Sm. 143° (*Bl.* [3] 29, 410 *C.* 1903 [1] 1363).
- 20) Phenylhydrazid d. Hexahydrobenzolcarbonsäure. Sm. 164° (*B.* 36, 1095 *C.* 1903 [1] 1139).
- $C_{13}H_{18}O_3N_2$  \*10)  $\delta$ -Phenylhydrazon- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 135° (*Soc.* 85, 1221 *C.* 1904 [2] 1108).
- 20) 3-Nitroso-4,4,6-Trimethyl-2-Phenyltetrahydro-1,3-Oxazin. Sm. 108–111° (*M.* 25, 862 *C.* 1904 [2] 1241).
- 21)  $\alpha$ -Phenylhydrazon- $\beta\beta$ -Dimethylbutan- $\alpha$ -Carbonsäure. Sm. 146° (*A.* 327, 207 *C.* 1903 [1] 1407).
- $C_{13}H_{18}O_3N_2$  13)  $r$ - $\alpha$ -[Phenylamidoformyl]amidoisocaprinsäure. Sm. 165° u. Zers. (*B.* 37, 2492 *Anm.* *C.* 1904 [2] 425).
- 14) Phenylamidoformyl-d-Isoleucin. Sm. 119–120° (*B.* 37, 1829 *C.* 1904 [1] 1645).
- $C_{13}H_{18}O_3N_4$  C 56,1 — H 6,5 — O 17,3 — N 20,1 — M. G. 278.
- 1) Hydrazid d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 188°. HCl (*J. pr.* [2] 70, 207 *C.* 1904 [2] 1459).
- 2) Hydrazid d.  $\gamma$ -Benzoylamidoacetylamidobuttersäure. Sm. 165–167° u. Zers. (*J. pr.* [2] 70, 226 *C.* 1904 [2] 1461).
- 3) Hydrazid d.  $\alpha$ -[ $\alpha$ -Benzoylamidopropionyl]amidopropionsäure. Sm. 183–184° (*J. pr.* [2] 70, 151 *C.* 1904 [2] 1394).
- $C_{13}H_{18}O_3Br_2$  1)  $\alpha$ ,3-Dimethyläther-4-Aethyläther d. 2-Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol. Sm. 63–64° (*B.* 37, 1131 *C.* 1904 [1] 1261).
- $C_{13}H_{18}O_4N_2$  6) Aethylester d. 1- $\alpha$ -Amidoacetylamido- $\beta$ -[4-Oxyphenyl]propionsäure. HCl (*B.* 37, 2496 *C.* 1904 [2] 425).
- $C_{13}H_{18}O_4N_4$  C 53,1 — H 6,1 — O 21,8 — N 19,0 — M. G. 294.
- 1) Aethylester d.  $\alpha$ -[ $\alpha$ -Phenylamidoformylsemicarbazido]propionsäure. Sm. 163° (*C.* 1904 [2] 1029).
- $C_{13}H_{18}O_4N_6$  C 48,4 — H 5,6 — O 19,9 — N 26,1 — M. G. 322.
- 1) Hydrazid d.  $\beta$ -Phenylureidoacetylamidoacetylamidoessigsäure. Sm. 241° u. Zers. HCl (*J. pr.* [2] 70, 261 *C.* 1904 [2] 1465).
- 2) Hydrazid d.  $\alpha$ -Benzoylamidoacetylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 213,5°. 2HCl (*J. pr.* [2] 70, 174 *C.* 1904 [2] 1396).
- $C_{13}H_{18}O_5Hg$  1) Verbindung (aus Methyl Eugenol) (*B.* 36, 3581 *C.* 1903 [2] 1363).
- $C_{13}H_{18}O_6N_2$  \*3) Phenylglykoseureid. Sm. 223° u. Zers. (*R.* 22, 66 *C.* 1903 [1] 1081).
- $C_{13}H_{18}O_7N_2$  C 49,7 — H 5,7 — O 35,7 — N 8,9 — M. G. 314.
- 1) 2-Oxybenzoylhydrazon d. d-Glykose. Zers. 198° (*C.* 1904 [2] 1494).
- 2) Diäthylester d.  $\delta\delta$ -Diimido- $\beta$ -Ketohehexan- $\gamma\zeta\zeta$ -Tricarbonsäure. Sm. 160° (*A.* 332, 145 *C.* 1904 [2] 191).
- $C_{13}H_{18}N_8J$  1) Jodmethylat d. 3-Methylimido-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 183° (*B.* 36, 3236 *C.* 1903 [2] 1190).
- $C_{13}H_{19}ON$  \*28) 4-tert. Amylphenylamid d. Essigsäure. Sm. 138–139° (*A.* 327, 222 *C.* 1903 [1] 1408).
- 30) O-Aethyleycanampfer (*C. r.* 136, 789 *C.* 1903 [1] 1085).

- $C_{13}H_{19}ON$  31) 4,4,6-Trimethyl-2-Phenyltetrahydro-1,3-Oxazin. Sd.  $131^{\circ}_{10}$ . (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ) (*M.* 25, 859 *C.* 1904 [2] 1241).
- $C_{13}H_{19}O_2N$  \*33) 2-Methylphenylester d. Diäthylamidoessigsäure. Fl. HCl, HBr, HJ (*Ar.* 240, 634 *C.* 1903 [1] 24).
- \*34) 3-Methylphenylester d. Diäthylamidoessigsäure. Fl. HCl, Br (*Ar.* 240, 635 *C.* 1903 [1] 24).
- \*35) 4-Methylphenylester d. Diäthylamidoessigsäure. Fl. HBr, Pikrat (*Ar.* 240, 635 *C.* 1903 [1] 24).
- 44) Betain d.  $\alpha$ -Methyldiäthylamidophenylessigsäure. Sm.  $85-87^{\circ}$  (*B.* 36, 4193 *C.* 1904 [1] 263).
- 45) norm. Hexylester d. Phenylamidoameisensäure. Sm.  $42^{\circ}$  (*C. r.* 138, 149 *C.* 1904 [1] 577).
- 46) Benzoat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylpropan. Sm.  $202^{\circ}$  (*C. r.* 138, 767 *C.* 1904 [1] 1196).
- $C_{13}H_{19}O_3N$  \*10) Diäthylamidoacetat d. 1,2-Dioxybenzolmonomethyläther. Fl. HCl, (2HCl,  $PtCl_4$ ), HBr (*Ar.* 240, 637 *C.* 1903 [1] 24).
- 11) Dimethyläther d. 4-Acetylamido-2,5-Dioxy-1-Propylbenzol. Sm.  $104^{\circ}$  (*B.* 36, 857 *C.* 1903 [1] 1084).
- 12) Dimethyläther d. 6-Acetylamido-3,4-Dioxy-1-Propylbenzol. Sm.  $144^{\circ}$  (*B.* 36, 860 *C.* 1903 [1] 1085).
- 13) Methyl ester d. 1-Methyl-1,2,3,4-Tetrahydrochinoliniumessigsäure. d-Camphersulfonat, d-Bromcamphersulfonat (*Soc.* 83, 1416 *C.* 1904 [1] 439).
- $C_{13}H_{19}O_3Br$  \*1)  $\alpha$ ,3-Dimethyläther-4-Aethyläther d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]propan. Sm.  $69-70^{\circ}$  (*B.* 37, 1130 *C.* 1904 [1] 1261).
- $C_{13}H_{19}O_3J$  1) Aethylester d. o-Jodcamphocarbonsäure. Sm.  $42-43^{\circ}$  (*B.* 36, 1727 *C.* 1903 [2] 37).
- $C_{13}H_{19}O_4N$  \*4) Diäthylester d. stab. 2,6-Dimethyl-1,4-Dihydropyridin-3,5-Dicarbonsäure (*B.* 36, 2848 *C.* 1903 [2] 1129; *B.* 36, 2852 *C.* 1903 [2] 1129).
- $C_{13}H_{19}O_4Br$  1) Tetramethyläther d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -[2,4,5-Trioxyphenyl]propan. Sm.  $77,5^{\circ}$  (*Ar.* 242, 100 *C.* 1904 [1] 1008).
- $C_{13}H_{19}O_5N$  9) 2,5-Dimethyläther-3-Aethyläther d. 4-Nitro-2,3,5-Trioxy-1-Propylbenzol. Sm.  $75^{\circ}$  (*B.* 36, 1719 *C.* 1903 [2] 114).
- 10) isom.  $\zeta$ -Benzylidenamido- $\alpha\beta\gamma\delta\epsilon$ -Pentaoxyhexan (Benzylidenemannamin). Sm.  $183^{\circ}$  u. Zers. (*C. r.* 138, 505 *C.* 1904 [1] 872).
- $C_{13}H_{19}N_2J$  2) Nitril d.  $\alpha$ -Methyldiäthyljodammoniumphenylessigsäure. Sm.  $128-129^{\circ}$  (*B.* 36, 4193 *C.* 1904 [1] 263).
- $C_{13}H_{20}ON_2$  10) Propyläther d. Propylhydrazonoxyphenylmethan. Sm.  $100^{\circ}$ . HBr (*J. pr.* [2] 70, 279 *C.* 1904 [2] 1545).
- $C_{13}H_{20}O_3N_2$  2) Amid d.  $\alpha$ -Diäthylamido- $\alpha$ -[4-Oxyphenyl]essigmethyläthersäure. Sm.  $161^{\circ}$  (*B.* 37, 4091 *C.* 1904 [2] 1725).
- $C_{13}H_{20}O_3N_4$  3) Diäthyläther d. Benzylidendi[- $\alpha$ -Amido- $\alpha$ -Imido- $\alpha$ -Oxymethan]. Sm.  $154^{\circ}$  (*C.* 1904 [2] 30).
- 4)  $\alpha$ -Aethylureido- $\beta$ -Aethyl- $\alpha$ -Benzylharnstoff. Sm.  $146^{\circ}$  (*B.* 37, 2326 *C.* 1904 [2] 312).
- $C_{13}H_{20}O_4N_2$  2) Methylphenylhydrazon d. Fukose. Sm.  $177^{\circ}$  (*B.* 37, 306 *C.* 1904 [1] 649).
- 3) Aethylester d.  $\alpha$ -Cyan- $\alpha$ -Oxypropion-[ $\beta$ -Cyan- $\alpha$ -Aethoxyisobutyl]-äthersäure. Sm.  $120^{\circ}$  (*C.* 1904 [1] 160).
- $C_{13}H_{20}O_4S_2$  1)  $\alpha$ -Isoamylsulfon- $\alpha$ -Phenylsulfonäthan. Sm.  $84-86^{\circ}$  (*B.* 36, 303 *C.* 1903 [1] 500).
- 2) 2,4-Di[Propylsulfon]-1-Methylbenzol. Sm.  $83-84^{\circ}$  (*J. pr.* [2] 68, 336 *C.* 1903 [2] 1172).
- $C_{13}H_{20}O_5N_2$  \*1) Methylphenylhydrazon d. d-Galaktose. Sm.  $189-190^{\circ}$  (*R.* 15, 225; *B.* 37, 305 *C.* 1904 [1] 649; *B.* 37, 3853 *C.* 1904 [2] 1711).
- \*4)  $\beta$ -Amid d.  $\beta$ -Cyan- $\gamma$ -Oxy- $\alpha$ -Ketohehexanäthyläther- $\beta\delta$ -Dicarbonsäure- $\delta$ -Aethylester? (*G.* 33 [2] 161 *C.* 1903 [2] 1282).
- 5) 4-Keto-1,3-Di[ $\alpha$ -Oximidoäthyl]-1,3-Di[Oxymethyl]-6-Methyl-1,2,3,4-Tetrahydrobenzol. Sm.  $268^{\circ}$  (*B.* 36, 2175 *C.* 1903 [2] 371).
- $C_{13}H_{20}O_6N_2$  10) isom.  $\alpha$ -[ $\beta\gamma\delta\epsilon\zeta$ -Pentaoxyhexyl]- $\beta$ -Phenylharnstoff (Mannaminphenylharnstoff). Sm.  $202^{\circ}$  (*C. r.* 138, 505 *C.* 1904 [1] 872).
- $C_{13}H_{20}NBr$  1) Methyläthylallyl-4-Methylphenylammoniumbromid. Zers. bei  $173$  bis  $174^{\circ}$  (*B.* 37, 2718 *C.* 1904 [2] 592).

- $C_{15}H_{20}NJ$  9) Methyläthylallyl-4-Methylphenylammoniumjodid. Sm. 140—142°. +  $CHCl_3$  (B. 37, 2716 C. 1904 [2] 591).
- $C_{15}H_{21}ON$  13) Methyläthylallyl-4-Methylphenylammoniumhydroxyd. Salze siehe (B. 37, 2716 C. 1904 [2] 592).
- 14) Oxim d. Allylcampher. Sd. 165—170°<sub>20</sub> (C. r. 136, 792 C. 1903 [1] 1086).
- 15) Oxim d. Pseudojonon. Sd. 190—195°<sub>20</sub> (C. 1904 [1] 280).
- 16) Methylhydroxyd d. 1-Benzylhexahydropyridin. d-Bromcampher-sulfonat (Soc. 83, 1143 C. 1903 [2] 1062).
- $C_{15}H_{21}ON_3$  C 66,4 — H 8,9 — O 6,8 — N 17,9 — M. G. 235.
- 1) 4-Semicarbazon-6-Isobutenyl-2,2-Dimethyl-1,2,3,4-Tetrahydro-benzol. Sm. 168—169° (L. BLACH, Dissert., Heidelberg 1900).
- 2) Semicarbazon d. Xyliton. Sm. 158—159° (L. BLACH, Dissert., Heidelberg 1900).
- 3) Semicarbazon d. Isoxyliton. Sm. 157° (L. BLACH, Dissert., Heidelberg 1900).
- $C_{15}H_{21}O_2N$  \*6) 1-Menthylester d. Cyanessigsäure. Sm. 83—84° (C. 1903 [1] 566; Soc. 85, 43 C. 1904 [1] 789).
- $C_{15}H_{21}O_3N$  3) d-Bornylester d.  $\alpha$ -Oximidopropionsäure. Sm. 90° (P. Ch. S. No. 230). — \*III, 338.
- $C_{15}H_{21}O_4N$  10) Diäthylester d.  $\delta$ -Cyan- $\gamma$ -Methylpentan- $\alpha$ - $\beta$ -Dicarbonsäure. Sd. 184 bis 194°<sub>20</sub> (C. 1903 [2] 1425).
- $C_{15}H_{21}O_5N$  C 57,6 — H 7,7 — O 29,5 — N 5,2 — M. G. 271.
- 1) Diäthylester d. 5-Imido-1-Oxy-1-Methylhexahydrobenzol-2,4-Dicarbonsäure. Sm. 92° (A. 332, 17 C. 1904 [1] 1565).
- $C_{15}H_{22}O_2Br_2$  1) Dibromid d. 9-Methyl-3-Isopropenylbicyklo-[1,3,3]-Nonan-5,7-diol. Sm. 161° u. Zers. (B. 36, 231 C. 1903 [1] 514).
- 2) Dibromid d. isom. 9-Methyl-3-Isopropenylbicyklo-[1,3,3]-Nonan-5,7-diol. Fl. (B. 36, 233 C. 1903 [1] 514).
- $C_{15}H_{22}O_4S$  1) Dihydro- $\alpha$ -Jononsulfonsäure +  $3H_2O$ . Sm. 80—88° u. Zers. Na (C. 1904 [1] 281).
- $C_{15}H_{22}O_6N_2$  C 51,6 — H 7,3 — O 31,8 — N 9,3 — M. G. 302.
- 1)  $\beta\delta$ -Diacetyl- $\beta\delta$ -Di[ $\alpha$ -Oximidoäthyl- $\alpha\epsilon$ -Dioxyptentan +  $H_2O$ . Sm. 252° (B. 36, 2174 C. 1903 [2] 371).
- $C_{15}H_{22}O_7N_4$  2) Diäthylester d. Carboxylamidooacetylamidooacetylamidooacetyl-essigsäure (Carbäthoxyltriglycylglycinäthylester). Sm. 235—236° (B. 36, 2103 C. 1903 [1] 1304).
- $C_{15}H_{22}NJ$  3) Methylidipropylphenylammoniumjodid. Sm. 156° (Soc. 83, 1407 C. 1904 [1] 438).
- $C_{15}H_{28}O_2N$  2)  $\alpha$ -[Methyl- $\beta$ -Oxyäthylamido]campher. Fl. (A. 307, 195). — \*III, 360.
- 3) Äthylester d. d-Bornylamidocamphersäure. Sm. 89° (Soc. 85, 686 C. 1904 [2] 331).
- 4) Äthylester d. Neobornylamidoameisensäure. Sm. 36° (Soc. 85, 688 C. 1904 [2] 332).
- $C_{15}H_{24}OS_2$  1) Äthylester d. Menthylxanthogensäure. Sm. 9° (C. 1904 [1] 1347).
- $C_{15}H_{24}O_{11}N_2$  1) Laktoseureid +  $11H_2O$ . Zers. (B. 36, 22, 72 C. 1903 [1] 1081).
- $C_{15}H_{26}O_2N$  C 68,7 — H 11,0 — O 14,1 — N 6,2 — M. G. 227.
- 1) Äthylester d. 1-Menthylamidoameisensäure. Sm. 59° (Soc. 85, 689 C. 1904 [2] 332).
- $C_{15}H_{26}O_{11}N_3$  C 39,1 — H 6,3 — O 44,1 — N 10,5 — M. G. 399.
- 1) Semicarbazon d. Cellose +  $2H_2O$ . Sm. 183—185° (Bl. [3] 31, 1078 C. 1904 [2] 1493).
- 2) Semicarbazon d. Laktose +  $2H_2O$ . Sm. 185° u. Zers. (Bl. [3] 31, 1078 C. 1904 [2] 1493).
- $C_{15}H_{28}NJ$  3) Jodmethylat d. Base  $C_{15}H_{23}N$  (aus  $\alpha$ -Camphylamin). Sm. 285° u. Zers. (C. r. 136, 1462 C. 1903 [2] 287).
- $C_{15}H_{27}ON$  8)  $\alpha$ -Acetylamidoundekan. Sm. 47—48° (Bl. [3] 29, 1214 C. 1904 [1] 355).
- 9)  $\beta$ -Oximidotridekan. Sm. 56—57° (Bl. [3] 29, 1130 C. 1904 [1] 258; Bl. [3] 29, 1211 C. 1904 [1] 355).
- 10) Methylhydroxyd d. Dimethylbornylamin (Soc. 85, 1195 C. 1904 [2] 1125).
- $C_{15}H_{27}O_2N$  \*2) Äthylester d. Diisoamylamidoameisensäure. Sd. 129—130°<sub>14</sub> (B. 36, 2477 C. 1903 [2] 559).
- $C_{15}H_{28}ON_2$  3)  $\alpha$ -[d-sec. Butyl]- $\beta\beta'$ -Diisobutylharnstoff. Sm. 84° (Ar. 242, 71 C. 1904 [1] 999).

$C_{13}H_{28}N_2S$  2)  $\alpha\alpha$ -Diisobutyl- $\beta$ -[d-sec. Butyl]thioharnstoff. Sm. 33° (Ar. 242, 61 C. 1904 [1] 998).

## — 13 IV —

- $C_{13}H_4O_9N_4Cl_2$  1) 4,4'-Dichlor-3,5,3',5'-Tetranitrodiphenylketon. Sm. 202° (G. 34 [1] 381 C. 1904 [2] 111).
- $C_{13}H_2O_2ClBr_6$  1)  $\alpha$ -Chlor-2,3,5,2',3',5'-Hexabrom-4,4'-Dioxydiphenylmethan. Sm. 215—217° u. Zers. (A. 330, 73 Anm. C. 1904 [1] 1148).
- $C_{13}H_2O_7N_3Cl_2$  1) 4,4'-Dichlor-3,5,3'-Trinitrodiphenylketon. Sm. 140° (G. 34 [1] 377 C. 1904 [2] 110).
- $C_{13}H_2O_5N_2Cl_2$  2) 4,4'-Dichlor-3,3'-Dinitrodiphenylketon. Sm. 120° (G. 34 [1] 377 C. 1904 [2] 110).
- $C_{13}H_2O_5N_2Br_2$  2) 3,3'-Dibrom-*p*-Dinitrodiphenylketon. Sm. 209° (B. 37, 3484 C. 1904 [2] 1131).
- 3) 3,4'-Dibrom-*p*-Dinitrodiphenylketon. Sm. 181° (B. 37, 3485 C. 1904 [2] 1131).
- $C_{13}H_2O_6N_2Br_4$  1) 2,5,2',5'[oder 5,6,5',6']-Tetrabrom-3,3'-Dinitro-4,4'-Dioxydiphenylmethan. Sm. 244° (A. 333, 366 C. 1904 [2] 1117).
- $C_{13}H_2O_2NS$  2) Carbindophenin (B. 37, 3349 C. 1904 [2] 1058).
- $C_{13}H_7O_2NCl_4$  1) Phenylamidoformiat d. 2,3,4,6-Tetrachlor-1-Oxybenzol. Sm. 141—142° (B. 37, 4016 C. 1904 [2] 1716).
- $C_{13}H_2O_2NCl$  3) Verbindung (aus Phenol u. o-Nitrobenzaldehyd). Sm. oberh. 200° (Bl. [3] 31, 531 C. 1904 [1] 1598).
- $C_{13}H_2O_3NCl$  3) 4-Chlor-4'-Nitrodiphenylketon. Sm. 98° (R. 23, 107 C. 1904 [1] 1136).
- $C_{13}H_2O_3NBr$  2) 4-Brom-4'-Nitrodiphenylketon. Sm. 134° (R. 23, 108 C. 1904 [1] 1136).
- $C_{13}H_2O_5NBr$  1) Phenylester d. 3-Brom-5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 165° (G. 34 [1] 273 C. 1904 [1] 1499).
- 2) Phenylester d. *p*-Brom-*p*-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 193—195° (G. 34 [1] 275 Anm. C. 1904 [1] 1499).
- $C_{13}H_2O_5N_2Br$  5) 3-Brom-*p*-Dinitro-3'-Amidodiphenylketon. Sm. 250° (B. 37, 3485 C. 1904 [2] 1131).
- 6) 3-Brom-*p*-Dinitro-4'-Amidodiphenylketon. Sm. 240° (B. 37, 3486 C. 1904 [2] 1131).
- $C_{13}H_2O_6N_2Br_2$  1) 5,5'-Dibrom-3,3'-Dinitro-4,4'-Dioxydiphenylmethan. Sm. 232° (A. 333, 365 C. 1904 [2] 1117).
- $C_{13}H_2O_6N_2Br$  1) 2-Brom-4,6-Dinitrophenyl-4-Nitrobenzylamin. Sm. 132° (R. 21, 429 C. 1903 [1] 506).
- $C_{13}H_2N_2Br_3S$  1) *p*-Dibrom-1-Phenylamidobenzthiazol. Sm. 195° (B. 36, 3129 C. 1903 [2] 1070).
- $C_{13}H_9ONCl_2$  \*1)  $\alpha$ -Oximido-4,4'-Dichlordiphenylmethan. Sm. 135° (C. r. 137, 711 C. 1903 [2] 1442).
- 8) 3,5-Dichlor-4-Amidodiphenylketon. Sm. 137° (Soc. 85, 345 C. 1904 [1] 1405).
- $C_{13}H_9ONBr_2$  \*3)  $\alpha$ -Oximido-4,4'-Dibromdiphenylmethan. Sm. 150° (150—152°) (C. r. 137, 710 C. 1903 [2] 1442; Am. 30, 452 C. 1904 [1] 377).
- $C_{13}H_9ONBr_4$  1) Phenyl-3,4,5,6-Tetrabrom-2-Oxybenzylamin. Sm. 165—170° u. Zers. (A. 332, 179 C. 1904 [2] 209).
- $C_{13}H_9ONJ_2$  5) 3,4-Dijodphenylamid d. Benzolcarbonsäure. Sm. 174° (C. r. 136, 1078 C. 1903 [1] 1339).
- $C_{13}H_9ON_2S_2$  1) 1-Naphtylamid d. Isorhodanformylthioameisensäure. Sm. 182° (Soc. 83, 94 C. 1903 [1] 230, 447).
- $C_{13}H_9OCIS$  1) Benzoat d. 4-Chlor-1-Merkaptobenzol. Sm. 75—76° (C. r. 138, 983 C. 1904 [1] 1413).
- $C_{13}H_9OBrS$  1) Benzoat d. 4-Brom-1-Merkaptobenzol. Sm. 83—84° (C. r. 138, 983 C. 1904 [1] 1413).
- $C_{13}H_9O_2NCl_2$  2)  $\alpha\alpha$ -Dichlor-4-Nitrodiphenylmethan. Sm. 56—57° (B. 37, 605 C. 1904 [1] 887).
- $C_{13}H_9O_2NBr_2$  \*3) 2,6-Dibrom-4-Benzoylamido-1-Oxybenzol (Soc. 81, 1479 C. 1903 [1] 144).
- $C_{13}H_9O_2N_2Cl$  7) Phenyl-4-Chlor-2-Nitrobenzylidenamin. Sm. 93° (B. 37, 1865 C. 1904 [1] 1600).

- $C_{13}H_9O_2N_2Cl$  8) Phenyl-6-Chlor-3-Nitrobenzylidenamin. Sm. 103° (*M.* 25, 369 *C.* 1904 [2] 322).
- $C_{13}H_9O_2N_2Br$  9) Phenylamid d. 4-Chlor-2-Nitrosobenzol-1-Carbonsäure. Sm. 170° (*B.* 37, 1870 *C.* 1904 [1] 1601).
- $C_{13}H_9O_2N_3Br_2$  2) Phenyl-4-Brom-2-Nitrobenzylidenamin. Sm. 105° (*B.* 37, 1869 *C.* 1904 [1] 1601).
- $C_{13}H_9O_2N_3Br_2$  1) Phenylamid d. 3, 5 - Dibrom - 4 - Oxyphenylazoameisensäure. Sm. 226—227° u. Zers. (*A.* 334, 173 *C.* 1904 [2] 834).
- $C_{13}H_9O_3NCl_2$  3) 2-Chlorbenzyläther d. 4-Chlor-2-Nitro-1-Oxybenzol. Sm. 117° (*D.R.P.* 142061 *C.* 1903 [2] 83).
- $C_{13}H_9O_3N_2Br$  6) 3-Brom-1-Benzylidenamido-2-Keto-1, 2-Dihydropyridin-5-Carbonsäure. Sm. 243° (*B.* 37, 3840 *C.* 1904 [2] 1616).
- $C_{13}H_9O_4N_2Br$  1) 6-Brom-2-Nitro-4-Benzoylamido-1-Oxybenzol. Sm. 247° (*Soc.* 81, 1478 *C.* 1903 [1] 23, 144).
- $C_{13}H_9O_4N_3Br_2$  2) Phenylamid d. 3-Brom-5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 221° (*G.* 34 [1] 275 *C.* 1904 [1] 1499).
- $C_{13}H_9O_4ClS$  2) 4, 6-Dibrom-2-Nitrophenyl-4-Nitrobenzylamin. Sm. 128° (*R.* 21, 430 *C.* 1903 [1] 506).
- $C_{13}H_9O_5N_3Cl_2$  \*2) 2-Chlorid d. Benzol-1-Carbonsäurephenylester-2-Sulfonsäure. Sm. 103—104° (*Am.* 30, 302 *C.* 1903 [2] 1122).
- $C_{13}H_9O_5N_3Cl_2$  1) 3', 5'-Dichlor-4, 6-Dinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 230° (*B.* 37, 2094 *C.* 1904 [2] 34).
- $C_{13}H_9O_5N_3Cl_2$  2) Methyläther d. p-Dichlor-2', 4'-Dinitro-2-Oxydiphenylamin. Sm. 206—207° (*B.* 36, 3270 *C.* 1903 [2] 1127).
- $C_{13}H_9O_7NS$  2) 1-Phenylester d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. K, Ba + 5H<sub>2</sub>O (*Am.* 30, 377 *C.* 1904 [1] 275).
- $C_{13}H_9NClBr$  1)  $\alpha$ -Chlor- $\alpha$ -Phenylimido- $\alpha$ -[4-Bromphenyl]methan. Sm. 78°; Sd. 205—207°<sub>12</sub> (*Am.* 30, 34 *C.* 1903 [2] 363).
- $C_{13}H_{10}ONCl$  \*8) Phenylchloramid d. Benzolcarbonsäure. Sm. 81,5—82° (*Am.* 29, 305 *C.* 1903 [1] 1166).
- $C_{13}H_{10}ONCl$  \*10) 4-Chlorphenylamid d. Benzolcarbonsäure. Sm. 187—187,5° (192—193°) (*Am.* 29, 306 *C.* 1903 [1] 1166; *R.* 22, 11 *C.* 1903 [1] 1082; *J. pr.* [2] 67, 453 *C.* 1903 [1] 1421).
- $C_{13}H_{10}ONCl$  13) 5-Chlor-2-Amidodiphenylketon. Sm. 100° (*Soc.* 85, 344 *C.* 1904 [1] 1405).
- $C_{13}H_{10}ONCl$  14) 3-Chlor-4-Amidodiphenylketon. Sm. 140° (*Soc.* 85, 342 *C.* 1904 [1] 1405).
- $C_{13}H_{10}ONBr_3$  1) Phenyl-2, 4, 6-Tribrom-3-Oxybenzylamin. Sm. 96° (*A.* 332, 182 *C.* 1904 [2] 209).
- $C_{13}H_{10}ON_2Cl_2$  7)  $\alpha$ -Phenyl- $\beta$ -[3, 5-Dichlor-2-Oxybenzyliden]hydrazin. Sm. 153° (*B.* 37, 4028 *C.* 1904 [2] 1718).
- $C_{13}H_{10}ON_2Br_2$  10) Monobenzoylderivat d. 2, 6-Dibrom-1, 4-Diamidobenzol. Sm. 194° (*Am.* 31, 219 *C.* 1904 [1] 1073).
- $C_{13}H_{10}ON_2S$  6) 2-Imido-4-Keto-3-[2-Naphtyl]tetrahydrothiazol. Sm. 147° (*C.* 1903 [2] 110).
- $C_{13}H_{10}ON_2S$  7) 2-[2-Naphtyl]imido-4-Ketotetrahydrothiazol (stabil. 2-Naphtylpseud. . . . . u. Zers. (*C.* 1903 [2] 110).
- $C_{13}H_{10}O_2NCl$  3) 2-Chlor-4'-Nitrodiphenylmethan<sup>p</sup> Sm. 67° (*R.* 23, 108 *C.* 1904 [1] 1136).
- $C_{13}H_{10}O_2NCl$  4) 4-Chlor-4'-Nitrodiphenylmethan. Sm. 104° (*R.* 23, 107 *C.* 1904 [1] 1136).
- $C_{13}H_{10}O_2NCl_3$  1) Phenylaminverbindung (aus 2, 3, 5, 6-Tetrachlor-1-Oxy-4-Keto-1-Methyl-1, 4-Dihydrobenzol). Sm. 192° (*A.* 328, 303 *C.* 1903 [2] 1248).
- $C_{13}H_{10}O_2NBr$  5) 2-Brom-4'-Nitrodiphenylmethan<sup>p</sup> Sm. 73° (*R.* 23, 109 *C.* 1904 [1] 1136).
- $C_{13}H_{10}O_2NBr$  6) 4-Brom-4'-Nitrodiphenylmethan. Sm. 121° (*R.* 23, 108 *C.* 1904 [1] 1136).
- $C_{13}H_{10}O_2N_2S$  8) Nitril d. 3-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 126,5 bis 127° (*C.* 1904 [2] 102).
- $C_{13}H_{10}O_2N_2S$  9) Phenyleyanamid d. Benzolsulfonsäure. Sm. 66—67° (*B.* 37, 2810 *C.* 1904 [2] 592).
- $C_{13}H_{10}O_2N_3Cl$  \*2) 6-Chlor-3-Nitrobenzylidenphenylhydrazin. Sm. 183° (*M.* 25, 367 *C.* 1904 [2] 322).

- $C_{18}H_{10}O_2N_3Cl$  3) Phenyl-4-Chlor-2-Nitrobenzylidenhydrazin. Sm. 176—177° (180—181°) (B. 36, 3301 C. 1903 [2] 1173; D.R.P. 149748 C. 1904 [1] 909).
- $C_{13}H_{10}O_2N_3Br$  4) Phenyl-4-Brom-2-Nitrobenzylidenhydrazin. Sm. 181—182° (B. 36, 3303 C. 1903 [2] 1173; D.R.P. 149748 C. 1904 [1] 909).
- $C_{13}H_{10}O_2N_3J$  1) Phenyl-4-Jod-2-Nitrobenzylidenhydrazin. Sm. 185° (B. 36, 3303 C. 1903 [2] 1173; D.R.P. 149749 C. 1904 [1] 909).
- $C_{18}H_{10}O_3NCl$  1) 2-Nitrophenyläther d. 2-Chlor-1-Oxymethylbenzol. Sm. 89° (D.R.P. 142061 C. 1903 [2] 83).  
2) 2-Nitrophenyläther d. 4-Chlor-1-Oxymethylbenzol. Sm. 75—78° (D.R.P. 142061 C. 1903 [2] 83).  
3) Benzyläther d. 4-Chlor-2-Nitro-1-Oxybenzol. Sm. 86° (D.R.P. 142899 C. 1903 [2] 83).
- $C_{18}H_{10}O_3NBr$  \*3) 4-Brom-2-Nitrobenzyläther d. Oxymethylbenzol. Sm. 88—89° (D.R.P. 142899 C. 1903 [2] 83).
- $C_{13}H_{10}O_3N_2S_2$  1) 2-Thiocarbonyl-4-Keto-5-[2-Nitrobenzyliden]-3-Allyltetrahydrothiazol. Sm. 73° (M. 24, 513 C. 1903 [2] 837).  
2) 2-Thiocarbonyl-4-Keto-5-[3-Nitrobenzyliden]-3-Allyltetrahydrothiazol. Sm. 145° (M. 25, 161 C. 1904 [1] 894).  
3) 2-Thiocarbonyl-4-Keto-5-[4-Nitrobenzyliden]-3-Allyltetrahydrothiazol. Sm. 153° (M. 25, 162 C. 1904 [1] 894).
- $C_{18}H_{10}O_3N_3Cl$  3) Azoverbindung (aus 4-Nitrodiazobenzol u. 6-Chlor-2-Oxy-1-Methylbenzol). Sm. 230° (B. 37, 1020 C. 1904 [1] 1202).
- $C_{18}H_{10}O_3N_3Br$  6)  $\alpha$ -Phenyl- $\beta$ -[5-Brom-3-Nitro-2-Oxybenzyliden]hydrazin. Sm. 243° (B. 37, 3936 C. 1904 [2] 1596).  
7) Azoverbindung (aus 4-Nitrodiazobenzol u. 6-Brom-2-Oxy-1-Methylbenzol). Sm. 215° (B. 37, 1022 C. 1904 [1] 1203).
- $C_{18}H_{10}O_4N_3Br$  1) 4-Brom-2-Nitrophenyl-4-Nitrobenzylamin. Sm. 151° (R. 21, 430 C. 1903 [1] 506).  
2) 2-Brom-4-Nitrophenyl-4-Nitrobenzylamin. Sm. 180° (R. 21, 429 C. 1903 [1] 506).  
3) Phenylhydrazid d. 3-Brom-5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 190° (G. 34 [1] 276 C. 1904 [1] 1499).
- $C_{18}H_{10}O_5N_2S$  5) 1-[2-Nitrobenzyliden]amidobenzol-4-Sulfonsäure (D.R.P. 97948 C. 1898 [2] 742). — \*III, 22.  
6) 1-[4-Nitrobenzyliden]amidobenzol-4-Sulfonsäure (D.R.P. 97948 C. 1898 [2] 742). — \*III, 22.
- $C_{18}H_{10}O_5N_3Cl$  1) 3'-Chlor-4,6-Dinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 176° (B. 37, 2093 C. 1904 [2] 34).
- $C_{18}H_{10}O_5N_2S$  5) 2-Amid d. 4-Nitrobenzol-1-Carbonsäurephenylester-2-Sulfonsäure. Sm. 135° (Am. 30, 385 C. 1904 [1] 275).
- $C_{18}H_{10}ONClS$  1) 4-Chlorphenylamid d. Benzolthiocarbonsäure. Sm. 146—147° (J. pr. [2] 67, 464 C. 1903 [1] 1422).
- $C_{18}H_{10}NBrS$  1) Phenylamid d. 4-Brombenzol-1-Thiocarbonsäure. Sm. 161 bis 162° (C. 1904 [1] 1003).
- $C_{18}H_{10}N_2Cl_2S$  \*2) s-Di[3-Chlorphenyl]thioharnstoff (B. 36, 197 C. 1903 [1] 450).  
\*3) s-Di[4-Chlorphenyl]thioharnstoff. Sm. 141° (B. 36, 197 C. 1903 [1] 450).
- $C_{18}H_{10}N_2Br_2S$  2) s-Di[3-Bromdiphenyl]thioharnstoff. Sm. 135° (B. 36, 197 C. 1903 [1] 450).
- $C_{18}H_{10}N_2Br_4S$  1) Verbindung (aus s-Diphenylthioharnstoff). Sm. 136° (B. 36, 3127 C. 1903 [2] 1070).
- $C_{18}H_{11}ONCl_2$  2) 2-Chlorbenzyläther d. 4-Chlor-2-Amido-1-Oxybenzol. HCl (D.R.P. 142061 C. 1903 [2] 83).
- $C_{18}H_{11}ONS_2$  1) 2-Thiocarbonyl-4-Keto-3-Allyl-5-Benzylidentetrahydrothiazol. Sm. 144° (M. 24, 506 C. 1903 [2] 836).  
2) 2-Thiocarbonyl-4-Keto-5-Cinnamyliden-3-Methyltetrahydrothiazol. Sm. 226° (M. 25, 172 C. 1904 [1] 895).
- $C_{18}H_{11}ON_2Cl$  \*11)  $\alpha$ -Phenyl- $\beta$ -[5-Chlor-2-Oxybenzyliden]hydrazin. Sm. 148° (B. 37, 4025 C. 1904 [2] 1717).  
15)  $\alpha$ -Oximido- $\alpha$ -[4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 173 bis 174°. +  $C_6H_5O$ , immt. (J. pr. [2] 67, 470 C. 1903 [1] 1422).  
16) Chlorid d.  $\beta\beta$ -Diphenylhydrazidoameisensäure (B. 36, 3156 C. 1903 [2] 1057).

- $C_{13}H_{11}ON_2Br$  \*8)  $\alpha$ -Phenyl- $\beta$ -[5-Brom-2-Oxybenzyliden]hydrazin. Sm. 151° (B. 37, 3934 C. 1904 [2] 1596).
- $C_{13}H_{11}O_2NS_2$  1) 2-Thiocarbonyl-4-Keto-3-Allyl-5-[2-Oxybenzyliden]tetrahydrothiazol. Sm. 179° (M. 24, 508 C. 1903 [2] 836).
- $C_{13}H_{11}O_2N_3S$  \*1) s-3-Nitrodiphenylthioharnstoff. Sm. 155° (B. 36, 197 C. 1903 [1] 450; J. pr. [2] 67, 480 C. 1903 [1] 1407).
- $C_{13}H_{11}O_3NS$  \*3) Benzoylamid d. Benzolsulfonsäure. Sm. 146° (B. 37, 693 C. 1904 [1] 1074).
- $C_{13}H_{11}O_3NS_2$  1) 3,4-Methylenäther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Aethyltetrahydrothiazol. Sm. 154° (M. 25, 177 C. 1904 [1] 895).
- $C_{13}H_{11}O_3N_4Br$  1) 2-[4-Bromphenyl]-1,2,3,4-Tetrazin-6-Dimethylmalonsäure. Sm. 154°. 2 +  $C_6H_6$  (Soc. 83, 1255 C. 1903 [2] 1422).
- $C_{13}H_{11}O_3JS$  1) 2-Jodphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 73° (A. 332, 64 C. 1904 [2] 41).
- $C_{13}H_{11}O_4NS$  \*4) 1-Phenylester d. Benzol-1-Carbonsäure-2-Sulfonsäureamid. Sm. 132° (Am. 30, 295 C. 1903 [2] 1121).
- 1) Phenylester d. Phenylsulfonamidoameisensäure. Sm. 123° (B. 37, 694 C. 1904 [1] 1074).
- 12) 2-Phenylester d. Benzol-1-Carbonsäureamid-2-Sulfonsäure. Sm. 95° (Am. 30, 300 C. 1903 [2] 1122).
- $C_{13}H_{11}O_5NS$  8) Diphenylamin-2-Carbonsäure-3-Sulfonsäure. Na, Ba (D.R.P. 146102 C. 1903 [2] 1152).
- 9) Diphenylamin-2-Carbonsäure-4-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
- 10) Phenylester d. 4-Nitro-1-Methylbenzol-2-Sulfonsäure. Sm. 64° (Soc. 85, 1432 C. 1904 [2] 1740).
- $C_{13}H_{11}O_5N_2S$  1)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Sulfophenyl]azo- $\alpha$ -Nitromethan. K (C. 1903 [2] 427).
- $C_{13}H_{11}O_5NS$  6) 4'-Nitro-2-Methyldiphenyläther-2-Sulfonsäure. Sm. 115°. Na, K, Ba, Cu + 5H<sub>2</sub>O (C. 1903 [1] 509).
- 7) 4'-Nitro-3-Methyldiphenyläther-2-Sulfonsäure. Sm. 135°. Ba, Cu + 4H<sub>2</sub>O (Am. 28, 487 C. 1903 [1] 327).
- 8) 4'-Nitro-4-Methyldiphenyläther-2-Sulfonsäure. Sm. 102°. Na + 3½ H<sub>2</sub>O, Ba + 2H<sub>2</sub>O (C. 1903 [1] 634).
- $C_{13}H_{11}O_7N_3S$  3) 2',4'-Dinitro-2-Methyldiphenylamin-5-Sulfonsäure. Na (B. 36, 34 C. 1903 [1] 521).
- 4) 2',4'-Dinitro-4-Methyldiphenylamin-3-Sulfonsäure. Na (B. 36, 34 C. 1903 [1] 521).
- $C_{13}H_{11}O_8N_2Cl_3$  1) Diäthylester d. Trichlordinitrophenylmalonsäure. Sm. 82° (Am. 31, 381 C. 1904 [1] 1409).
- $C_{13}H_{11}N_2ClS$  \*1) s-2-Chlordiphenylthioharnstoff. Sm. 165° (B. 36, 196 C. 1903 [1] 450).
- 2) s-3-Chlordiphenylthioharnstoff. Sm. 120° (B. 36, 196 C. 1903 [1] 450).
- 3) s-4-Chlordiphenylthioharnstoff. Sm. 152° (B. 36, 197 C. 1903 [1] 450).
- $C_{13}H_{11}N_2BrS$  2) s-2-Bromdiphenylthioharnstoff. Sm. 161° (144°) (B. 36, 196 C. 1903 [1] 450).
- 3) s-3-Bromdiphenylthioharnstoff. Sm. oberh. 120° (B. 36, 196 C. 1903 [1] 450).
- $C_{13}H_{11}ClBrJ$  1) 3'-Brom-2-Methyldiphenyljodoniumchlorid. Sm. 170°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (J. pr. [2] 69, 330 C. 1904 [2] 36).
- 2) 3'-Brom-4-Methyldiphenyljodoniumchlorid. Sm. 174,5°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (J. pr. [2] 69, 329 C. 1904 [2] 36).
- $C_{13}H_{12}ONCl$  \*1) Aethyläther d.  $\alpha$ -Chlorimido- $\alpha$ -Oxy- $\alpha$ -[2-Naphtyl]methan. Sm. 71° (Am. 29, 317 C. 1903 [1] 1167).
- 4) 2-Chlor-1-[2-Oxybenzyl]amidobenzol. Sm. 118° (Ar. 240, 689 C. 1903 [1] 395).
- 5) 4-Chlor-1-[2-Oxybenzyl]amidobenzol. Sm. 121° (Ar. 240, 684 C. 1903 [1] 395).
- 6) Benzyläther d. 4-Chlor-2-Amido-1-Oxybenzol. HCl (D.R.P. 142899 C. 1903 [2] 83).

- $C_{13}H_{12}ONCl$  7) 2-Amidophenyläther d. 2-Chlor-1-Oxymethylbenzol. HCl (D.R.P. 142061 *C.* 1903 [2] 83).  
8) 2-Amidophenyläther d. 4-Chlor-1-Oxymethylbenzol. HCl (D.R.P. 142061 *C.* 1903 [2] 83).
- $C_{13}H_{12}ONCl_3$  1) 4-Methyl-2-[ $\gamma\gamma\gamma$ -Trichlor- $\beta$ -Oxypropyl]chinolin. Sm. 126° (*B.* 37, 1330 *C.* 1904 [1] 1360).
- $C_{13}H_{12}ONBr$  \*6) Aethyläther d.  $\alpha$ -Bromimido- $\alpha$ -Oxy- $\alpha$ -[2-Naphtyl]methan. Sm. 76,5—77° (*Am.* 29, 318 *C.* 1903 [1] 1167).  
9) 4-Brom-1-[2-Oxybenzyl]amidobenzol. Sm. 126° (*Ar.* 240, 685 *C.* 1903 [1] 395).  
10) Benzyläther d. 4-Brom-2-Amido-1-Oxybenzol. HCl (D.R.P. 142899 *C.* 1903 [2] 83).
- $C_{13}H_{12}OBrJ$  1) 3'-Brom-2-Methyldiphenyljodoniumhydroxyd. Salze siehe (*J. pr.* [2] 69, 330 *C.* 1904 [2] 36).  
2) 3'-Brom-4-Methyldiphenyljodoniumhydroxyd. Salze siehe (*J. pr.* [2] 69, 329 *C.* 1904 [2] 36).
- $C_{13}H_{12}O_4NCl$  5) Acetat d.  $\epsilon$ -[4-Chlorphenyl]imido- $\alpha$ -Oxy- $\alpha\gamma$ -Pentadiën. Sm. 129° (*A.* 333, 322 *C.* 1904 [2] 1149).
- $C_{13}H_{12}O_5N_2S$  12) 2-Naphtylpseudothiohydantoinsäure. Sm. 195—230° (*C.* 1903 [2] 110).
- $C_{13}H_{12}O_5N_2S$  11)  $\alpha$ -Phenylsulfon- $\beta$ -Phenylharnstoff. Sm. 158,4° (*B.* 37, 695 *C.* 1904 [1] 1074).  
12) 1-[4-Amidobenzyliden]amidobenzol-4-Sulfonsäure (D.R.P. 99542 *C.* 1899 [1] 238). — \*III, 22.
- $C_{13}H_{12}O_4N_2S$  12) 2-Methylphenylamid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 164° (*Soc.* 85, 1187 *C.* 1904 [2] 1115).  
13) 4-Methylphenylamid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 132° (*Soc.* 85, 1187 *C.* 1904 [2] 1115).
- $C_{13}H_{12}O_5N_2S$  6) 3-Nitrobenzylidenphenylaminbisulfid. Sm. 177° (*A.* 316, 141). — \*III, 21.  
7) 5-Nitro-2-Phenylamidophenylmethan- $\alpha$ -Sulfonsäure. Anilinsalz (D.R.P. 150366 *C.* 1904 [1] 1308).
- $C_{13}H_{12}O_5N_2S_2$  2)  $\alpha\beta$ -Di[Phenylsulfon]harnstoff. Sm. 159° (*B.* 37, 695 *C.* 1904 [1] 1074).
- $C_{13}H_{12}O_5N_6S$  1) 7-Phenylazo-2,6-Diketo-1,3-Dimethylpurin-7<sup>4</sup>-Sulfonsäure. Sm. noch nicht bei 265° (*B.* 37, 704 *C.* 1904 [1] 1562).
- $C_{13}H_{12}O_5N_4S$  1) Amid d. 2',4'-Dinitro-2-Methyldiphenylamin-5-Sulfonsäure. Sm. 209° (*B.* 36, 34 *C.* 1903 [1] 521).  
2) Amid d. 2',4'-Dinitro-4-Methyldiphenylamin-3-Sulfonsäure. Sm. 255° (*B.* 36, 34 *C.* 1903 [1] 521).
- $C_{13}H_{12}O_5N_4S_2$  2) 4'-Nitro-2'-Thioureido-4-Oxydiphenylamin-3-Sulfonsäure. (D.R.P. 139679 *C.* 1903 [1] 748).
- $C_{13}H_{12}O_5N_2Br_2$  3) Diäthylester d. ?-Dibrom-?-Dinitrophenylmethan- $\alpha\alpha$ -Dicarbonsäure (aus 3,4,5-Tribrom-1,2-Dinitrobenzol). Sm. 103—104° (*Am.* 30, 74 *C.* 1903 [2] 355).
- $C_{13}H_{12}N_3ClS$  5) anti- $\alpha$ -Phenylamido- $\beta$ -[3-Chlorphenyl]thioharnstoff. Sm. 120° (*B.* 32, 1084).  
6) syn- $\alpha$ -Phenylamido- $\beta$ -[3-Chlorphenyl]thioharnstoff. Sm. 168° (*B.* 32, 1084).  
7) anti- $\alpha$ -Phenylamido- $\beta$ -[4-Chlorphenyl]thioharnstoff. Sm. 133° (*B.* 32, 1084).  
8) syn- $\alpha$ -Phenylamido- $\beta$ -[4-Chlorphenyl]thioharnstoff. Sm. 165° (*B.* 32, 1084).
- $C_{13}H_{13}ON_2Cl$  \*2) Phenylamid d. Chlorpyridylumessigsäure. Sm. 234° u. Zers. +  $HgCl_2$ , 2 +  $PtCl_4$ , +  $AuCl_3$  (*Ar.* 241, 124 *C.* 1903 [1] 1023).
- $C_{13}H_{13}ON_2Br$  1) Phenylamid d. Brompyridylumessigsäure. Sm. 199—200° (*Ar.* 241, 124 *C.* 1903 [1] 1023).
- $C_{13}H_{13}ON_2P$  1) Phenylamid-4-Methylphenylimid d. Phosphorsäure. Sm. 188° (*Soc.* 83, 1045 *C.* 1903 [2] 663).
- $C_{13}H_{13}O_2NS$  \*7) Methylphenylamid d. Benzolsulfonsäure. Sm. 77,5—78° (*B.* 36, 2706 *C.* 1903 [2] 829).  
13) 3-Methylphenylamid d. Benzolsulfonsäure. Sm. 95° (*C.* 1904 [1] 1075; *Soc.* 85, 375 *C.* 1904 [1] 1412).

- $C_{13}H_{13}O_3NS_2$  1) Methyläther d. 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-Aethyltetrahydrothiazol. Sm. 143° (M. 25, 175 C. 1904 [1] 895).
- $C_{13}H_{13}O_3N_2Cl$  2) Aethylester d. 5-Chlor-3-Methyl-1-Phenylpyrazol-1<sup>3</sup>-Carbonsäure. Sd. 315° (B. 37, 2230 C. 1904 [2] 229).
- $C_{13}H_{13}O_3N_3S$  1) Aethyläther d. 5-Benzoylamido-2-Merkapto-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 238—239° (Am. 32, 144 C. 1904 [2] 957).
- $C_{13}H_{13}O_3NS$  17)  $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan- $\alpha$ -Sulfonsäure. Na, Anilinsalz (B. 37, 4080, 4083 C. 1904 [2] 1722).
- 18) 4-Methoxyphenylamid d. Benzolsulfonsäure. Sm. 95—96° (B. 37, 2810 C. 1904 [2] 592).
- $C_{13}H_{13}O_3NS_2$  1) 5<sup>3</sup>-Methyläther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Aethyltetrahydrothiazol. Sm. 140° (M. 25, 176 C. 1904 [1] 895).
- $C_{13}H_{13}O_4NS$  5) 2-Oxybenzylidenamidobenzolbisulfit. Sm. 128° (A. 316, 142). — \*III, 52.
- $C_{13}H_{13}O_5N_2J$  1) Diäthylester d. 3-Jod-4,6-Dinitrophenylmethandicarbonsäure? Sm. 83° (Am. 32, 305 C. 1904 [2] 1385).
- $C_{13}H_{14}ON_2Cl_4$  1) Verbindung (aus d. Chlormethyläther d.  $\alpha\beta$ -Trichlor- $\alpha$ -Oxyäthan u. 2 Molec. Pyridin). +  $PtCl_4$  (A. 330, 130 C. 1904 [1] 1064).
- $C_{13}H_{14}O_3NBr$  5) Aethyläther d. 5-Brom-6-Oxy-2-Keto-1-Aethyl-1,2-Dihydrochinolin. Sm. 95—97° (B. 36, 461 C. 1903 [1] 590).
- $C_{13}H_{14}O_2N_2S$  7) 2-[2,4-Dimethylphenyl]imido-4-Keto-3-Acetyltetrahydrothiazol. Sm. 165—166° u. Zers. (C. 1903 [2] 110).
- $C_{13}H_{14}O_3N_2S$  3) Verbindung (aus Dicyanbenzoylessigsäureäthylester). Sm. 160° (A. 332, 151 C. 1904 [2] 192).
- $C_{13}H_{14}O_4NJ$  1) Verbindung (aus Dihydroacetsäure u. Pyridin). Sm. 234° u. Zers. (G. 34 [1] 344 C. 1903 [2] 1385).
- $C_{13}H_{14}O_5NCl$  \*1) Diacetat d. 4[oder 6]-Chlor-6[oder 4]-Acetylamido-2,5-Dioxy-1-Methylbenzol. Sm. 197—198° (A. 328, 318 C. 1903 [2] 1247).
- $C_{13}H_{14}O_7N_4S_2$  1) 4,4'-Diamido-s-Diphenylharnstoff-3,3'-Dicarbonsäure (D.R.P. 140613 C. 1903 [1] 1010).
- $C_{13}H_{14}N_2ClBr$  1) 2-Chlorallylat d. 5-Brom-3-Methyl-1-Phenylpyrazol. Sm. 182° (A. 331, 212 C. 1904 [1] 1219).
- $C_{13}H_{14}N_2ClJ$  1) 2-Chlorallylat d. 5-Jod-3-Methyl-1-Phenylpyrazol. Sm. 193 bis 194° (A. 331, 213 C. 1904 [1] 1219).
- $C_{13}H_{15}ONBr_2$  2) Bromäthylat d. 5-Brom-6-Oxychinolinäthyläther +  $3H_2O$ . Sm. 80—85° (195° wasserfrei) (B. 36, 460 C. 1903 [1] 590).
- $C_{13}H_{15}ONS_2$  1) Gem. Anhydrid d. Benzolcarbonsäure u. Hexahydropyridin-1-Dithiocarbonsäure (N-Piperidyl-S-Benzoyldithiourethan). Sm. 89 bis 90° (B. 36, 3523 C. 1903 [2] 1326).
- $C_{13}H_{15}ON_2Cl_3$  1) Verbindung (aus d. Chlormethyläther d.  $\alpha\beta$ -Dichlor- $\alpha$ -Oxyäthan u. 2 Molec. Pyridin). +  $PtCl_4$ , 2 +  $AuCl_3$  (A. 330, 129 C. 1904 [1] 1064).
- $C_{13}H_{15}ON_3S$  1) Diäthyläther d. 5-Merkapto-3-Oxy-1-Phenyl-1,3,5-Triazin. Sm. 47—48° (Am. 32, 370 C. 1904 [2] 1506).
- $C_{13}H_{15}O_3N_2Cl_3$  \*1) Chloralantipyrrin. Sm. 67—68° (C. 1903 [2] 19).
- $C_{13}H_{15}O_3N_2Br$  2) Propyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin (J. pr. [2] 45, 186). — IV, 265.
- 3) Isopropyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 95° (J. pr. [2] 45, 187). — IV, 265.
- $C_{13}H_{15}O_3N_3S$  1) Aethylester d. 2-Phenylimido-5-Oxy-2,3-Dihydro-1,3,4-Thio-diazol-3-[Aethyl- $\alpha$ -Carbonsäure]. Sm. 171°. Na (C. 1904 [2] 1028).
- $C_{13}H_{15}O_4N_2Cl$  2)  $\alpha$ -Chloracetylamidoacetylamido- $\beta$ -Phenylpropionsäure. Sm. 151 bis 152° (B. 37, 3315 C. 1904 [2] 1307).
- $C_{13}H_{15}O_4N_2Br$  1)  $\alpha$ -Brom- $\beta$ -Phenylpropionylamidoacetylamidoessigsäure. Sm. 157 bis 158° (B. 37, 3066 C. 1904 [2] 1207).
- $C_{13}H_{15}O_5NS$  1) 4-Methylbenzolsulfonat d.  $\alpha$ -Cyan- $\beta$ -Oxypropen- $\alpha$ -Carbonsäure. Sm. 116° (Bl. [3] 31, 340 C. 1904 [1] 1135).
- $C_{13}H_{15}O_5BrS$  1)  $\alpha\gamma$ -Sulton d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -Phenylbutan- $\gamma$ -Sulfonsäure- $\delta$ -Carbonsäureäthylester. Sm. 121° (Am. 31, 255 C. 1904 [1] 1081).
- $C_{13}H_{16}ONBr$  2) 8-Brom-5-Propionylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 185—186° (Soc. 85, 746 C. 1904 [2] 447).

- $C_{18}H_{16}ON_2Cl_2$  1) Verbindung (aus d. Chlormethyläther d.  $\alpha$ -Chlor- $\alpha$ -Oxyäthan und Pyridin). +  $PtCl_4$ , +  $2AuCl_3$  (A. 330, 125 C. 1904 [1] 1064).
- $C_{18}H_{16}O_2NBr$  3) 3-Brom-4-Methylphenylester d. Hexahydropyridin-1-Carbonsäure. Sm. 75–76°; Sd. 262°<sub>94</sub> (B. [3] 29, 754 C. 1903 [2] 629).
- $C_{18}H_{16}O_2N_2Cl_2$  1) Verbindung (aus d. Methylenäther d. Chloroxymethan u. Pyridin). +  $PtCl_4$ , +  $2AuCl_3$  (A. 334, 37 C. 1904 [2] 948).
- $C_{18}H_{16}O_2N_2S$  2) 5-Isopropylsulfon-3-Methyl-1-Phenylpyrazol. Sm. 83° (A. 331, 236 C. 1904 [1] 1221).
- 3) 5-Aethylsulfon-3,4-Dimethyl-1-Phenylpyrazol. Sm. 115° (A. 331, 244 C. 1904 [1] 1221).
- $C_{18}H_{18}O_4NCl$  1) Aethylester d. 1- $\alpha$ -Chloracetylamido- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 87–88° (B. 37, 2495 C. 1904 [2] 425).
- $C_{18}H_{17}ON_2S$  1) 1-Phenylamido-2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Aethyl-tetrahydroimidazol. Sm. 85° (C. 1904 [2] 1028).
- $C_{18}H_{17}O_2NBr_2$  2) Acetat d. Diäthyl-3,5-Dibrom-2-Oxybenzylamin (A. 332, 221 C. 1904 [2] 203).
- $C_{18}H_{17}O_2N_2Br$  1) Methylester d.  $\gamma$ -[4-Bromphenyl]hydrazon- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm. 90° (Soc. 83, 1231 C. 1903 [2] 1420).
- $C_{18}H_{17}O_6N_2Cl$  1) 4-Chlorbenzoylhydrazon d. d-Glykose. Zers. bei 211° (C. 1904 [2] 1493).
- $C_{18}H_{17}O_6N_2Br$  1) 4-Brombenzoylhydrazon d. d-Galaktose. Zers. bei 216° (C. 1904 [2] 1493).
- 2) 4-Brombenzoylhydrazon d. d-Glykose. Zers. bei 206–207° (C. 1904 [2] 1493).
- 3) 4-Brombenzoylhydrazon d. d-Mannose (C. 1904 [2] 1493).
- $C_{18}H_{17}N_2ClS$  1) 2-Chlormethylat d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol-5-Methyläther. Sm. 91°. 2 +  $PtCl_4$  (A. 331, 218 C. 1904 [1] 1219).
- $C_{18}H_{17}N_2JS$  2) 2-Jodmethylat d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol-5-Methyläther. Sm. 167° (A. 331, 218 C. 1904 [1] 1219).
- 3) 2-Jodmethylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Aethyläther. Sm. 158° (A. 331, 201, 234 C. 1904 [1] 1218).
- 4) 2-Jodäthylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Methyläther. Sm. 203° (A. 331, 209, 227 C. 1904 [1] 1219).
- $C_{18}H_{18}ONCl$  2) Nitrosochlorid d.  $\alpha$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylpropen. Sm. 136° (B. 37, 929 C. 1904 [1] 1209).
- $C_{18}H_{18}ON_2S$  4) s-Caproylphenylthioharnstoff. Sm. 77–78° (Soc. 85, 809 C. 1904 [2] 201, 519).
- $C_{18}H_{18}O_2NCl$  2) Chlormethylat d. 1,2,3,4-Tetrahydrochinolin-1-Essigsäuremethylester. 2 +  $PtCl_4$  (Soc. 83, 1417 C. 1904 [1] 439).
- $C_{18}H_{18}O_4NJ$  2) Jodmethylat d. 3,4,5-Trioxy-1-[ $\beta$ -Dimethylamidoäthyl]benzol-4,5-Methylenäther-2-Carbonsäurealdehyd (Norcotarninmethinmethyljodid). Sm. 272° (B. 36, 1529 C. 1903 [2] 52).
- $C_{18}H_{18}O_6N_2S$  1) Tetraoxybutyl-N-Phenylthiohydantoinsäure. Sm. 178–180° u. Zers. (B. 35, 4014 C. 1903 [1] 390).
- $C_{18}H_{19}O_2NS$  4) Sultam d.  $\gamma$ -Oxy- $\gamma$ -Phenylpentan- $\gamma^2$ -Sulfonsäureäthylamid. Sm. 140–150° (B. 37, 3259 C. 1904 [2] 1031).
- $C_{18}H_{19}O_2N_2Cl$  2) Verbindung (aus Chlordimethyläther u. Cytisin). +  $AuCl_3$  (A. 334, 56 C. 1904 [2] 949).
- $C_{18}H_{20}O_2NBr$  1) Mentylester d. Bromcyanessigsäure. Sm. 134–135° (C. 1903 [1] 566; Soc. 85, 44 C. 1904 [1] 789).
- $C_{18}H_{20}O_3NP$  1) Diäthylester d. 1,2,3,4-Tetrahydro-1-Chinolyphosphinsäure. Sd. 155°<sub>8</sub> (A. 326, 188 C. 1903 [1] 820).
- $C_{18}H_{20}O_5NP$  1) Triäthylester d. Phenylamidophosphinsäure-3-Carbonsäure. Sd. 232–234° (A. 326, 242 C. 1903 [1] 868).
- 2) Triäthylester d. Phenylamidophosphinsäure-4-Carbonsäure. Sd. 206–207° (A. 326, 244 C. 1903 [1] 868).
- $C_{18}H_{21}O_2N_2J$  2) Jodäthylat d. Isopilocarpin (B. 35, 2454). — \*III, 685.
- $C_{18}H_{21}O_3NS$  3) Aethylamid d.  $\gamma$ -Oxy- $\gamma$ -Phenylpentan- $\gamma^2$ -Sulfonsäure. Sm. 99 bis 100° (B. 37, 3258 C. 1904 [2] 1031).
- 4) Verbindung (aus Aethylsaccharin). Sm. 99–100° (B. 37, 389 C. 1904 [1] 669).
- $C_{18}H_{26}ONJ$  1) Jodmethylat d. Dimethylupinin. Fl. (B. 35, 1924). — \*III, 664.
- $C_{18}H_{26}O_4NBr$  1) Brommethylat d.  $\delta$ -Dimethylamidobutan- $\alpha\alpha$ -Dicarbonsäure-diäthylester (B. 37, 1855 C. 1904 [1] 1487).

- $C_{13}H_{29}O_2N_2P$  1) Aethyläther d. Dipiperidylmethyloxyphosphoniumhydroxyd (A. 326, 167 C. 1903 [1] 762).
- $C_{13}H_{31}ON_2P$  1) Di[Dipropylamid] d. Methylphosphinsäure. Sd. 176—180<sup>25</sup> (A. 326, 165 C. 1903 [1] 762).

## — 13 V —

- $C_{13}H_9O_5N_2ClBr$  1) 4'-Chlor-3-Brom-2-Dinitrodiphenylketon. Sm. 165° (B. 37, 3486 C. 1904 [2] 1131).
- $C_{13}H_7ONClBr_3$  1) 2,4,6-Tribromphenylechloramid d. Benzolcarbonsäure. Sm. 115° (Soc. 85, 181 C. 1904 [1] 938).
- $C_{13}H_7ONCl_2Br_2$  1) 2-Chlor-4,6-Dibromphenylechloramid d. Benzolcarbonsäure. Sm. 97° (Soc. 85, 182 C. 1904 [1] 938).
- 2) 4-Chlor-2,6-Dibromphenylechloramid d. Benzolcarbonsäure. Sm. 111° (Soc. 85, 181 C. 1904 [1] 938).
- $C_{13}H_7ONCl_3Br$  1) 2,4-Dichlor-6-Bromphenylechloramid d. Benzolcarbonsäure. Sm. 92° (Soc. 85, 182 C. 1904 [1] 938).
- 2) 2,6-Dichlor-4-Bromphenylechloramid d. Benzolcarbonsäure. Sm. 95° (Soc. 85, 182 C. 1904 [1] 938).
- $C_{13}H_9ONClBr_2$  1) 2-Chlor-4,6-Dibromphenylamid d. Benzolcarbonsäure. Sm. 192° (Soc. 85, 182 C. 1904 [1] 938).
- 2) 4-Chlor-2,6-Dibromphenylamid d. Benzolcarbonsäure. Sm. 194° (Soc. 85, 181 C. 1904 [1] 938).
- $C_{13}H_9ONCl_2Br$  1) 2,6-Dichlor-4-Bromphenylamid d. Benzolcarbonsäure. Sm. 195° (Soc. 85, 181 C. 1904 [1] 938).
- 2) 2-Chlor-4-Bromphenylechloramid d. Benzolcarbonsäure. Sm. 74° (Soc. 85, 180 C. 1904 [1] 938).
- 3) 4-Chlor-2-Bromphenylechloramid d. Benzolcarbonsäure. Sm. 62° (Soc. 85, 180 C. 1904 [1] 938).
- $C_{13}H_9O_3NBrS$  1) Phenylimid d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 184,5° (Am. 30, 493 C. 1904 [1] 370).
- $C_{13}H_9O_6NCl_2S$  1) 2-Chlorid d. 4-Nitrobenzol-1-Carbonsäurephenylester-2-Sulfonsäure. Sm. 145—147° (Am. 30, 375 C. 1904 [1] 275).
- $C_{13}H_9ONClBr$  4) 2-Chlor-4-Bromphenylamid d. Benzolcarbonsäure. Sm. 145° (Soc. 85, 180 C. 1904 [1] 938).
- 5) 4-Chlor-2-Bromphenylamid d. Benzolcarbonsäure. Sm. 130,5° (Soc. 85, 180 C. 1904 [1] 938).
- $C_{13}H_{10}O_2NCl_3S$  1) 2,4-Dichlorphenylechloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 81° (Soc. 85, 1186 C. 1904 [2] 1115).
- $C_{13}H_{11}O_2NCl_2S$  1) 4-Chlorphenylechloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 102° (Soc. 85, 1185 C. 1904 [2] 1115).
- 2) 2,4-Dichlorphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 126° (Soc. 85, 1186 C. 1904 [2] 1115).
- 3) 2,4-Dichlor-3-Methylphenylamid d. Benzolsulfonsäure. Sm. 114° (C. 1904 [1] 1075; Soc. 85, 376 C. 1904 [1] 1412).
- $C_{13}H_{11}O_4N_2ClS$  3) 2-Methylphenylechloramid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 118° u. Zers. (Soc. 85, 1187 C. 1904 [2] 1115).
- 4) 4-Methylphenylechloramid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 115° (Soc. 85, 1187 C. 1904 [2] 1115).
- $C_{13}H_{12}O_2NClS$  5) Phenylechloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 91° (Soc. 85, 1184 C. 1904 [2] 1115).
- 6) 4-Chlorphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 95° (Soc. 85, 1184 C. 1904 [2] 1115).
- 7) 5-Chlor-2-Methylphenylamid d. Benzolsulfonsäure. Sm. 124 bis 125° (C. 1904 [1] 1075; Soc. 85, 374 C. 1904 [1] 1412).
- 8) 4-Chlor-3-Methylphenylamid d. Benzolsulfonsäure. Sm. 130° Na (C. 1904 [1] 1075; Soc. 85, 375 C. 1904 [1] 1412).
- 9) 2-Chlor-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 110° (C. 1904 [1] 1075; Soc. 85, 376 C. 1904 [1] 1412).
- 10) 2-Methylphenylechloramid d. Benzolsulfonsäure. Sm. 99—100° (106°) (C. 1904 [1] 1075; Soc. 85, 374 C. 1904 [1] 1411; Soc. 85, 1186 C. 1904 [2] 1115).
- 11) 4-Methylphenylechloramid d. Benzolsulfonsäure. Sm. 86° (Soc. 85, 1186 C. 1904 [2] 1115).

- $C_{13}H_{13}O_2NJS$  1) Methylphenylamid d. 4-Jodbenzol-1-Sulfonsäure. Sm. 111° (A. 332, 58 C. 1904 [2] 41).  
 2) 3-Jodphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 128° (A. 332, 61 C. 1904 [2] 41).
- $C_{13}H_{13}O_2NCIP$  1) 4 - Methylphenylmonamid d. Phenylphosphorsäurechlorid. Sm. 77° (A. 326, 237 C. 1903 [1] 867).
- $C_{13}H_{13}O_3NBrP$  1) 4 - Bromphenylmonamid d. Phosphorsäuremono[4 - Methylphenylester]. Sm. 230° (A. 326, 233 C. 1903 [1] 867).
- $C_{13}H_{15}O_3N_2ClS$  1)  $\beta$ -Chlorpropylthiopyrintrioxyd +  $H_2O$ . Sm. 244° u. Zers. (A. 331, 214 C. 1904 [1] 1219).
- $C_{13}H_{17}O_2N_2ClS$  1) Chlormethylat d. 5-Methylsulfon-3,4-Dimethyl-1-Phenylpyrazol. Sm. 81°. 2 +  $PtCl_4$  (A. 331, 243 C. 1904 [1] 1221).
- $C_{13}H_{17}O_2N_2JS$  1) Jodmethylat d. 5-Methylsulfon-3,4-Dimethyl-1-Phenylpyrazol. Sm. 188° (A. 331, 242 C. 1904 [1] 1221).
- $C_{13}H_{17}O_4NBrJ$  1) Jodmethylat d. 6 - Brom - 3, 4, 5 - Trioxy-1-[ $\beta$ -Dimethylamidoäthyl]benzol - 3 - Methyläther - 4, 5 - Methylenäther - 2 - Carbonsäurealdehyd (Bromnecotarninmethinmethyljodid). Zers. bei 264° (B. 36, 1535 C. 1903 [2] 52).
- $C_{18}H_{28}ON_2JS$  1) Äthyläther d. Dipiperidylmethyloxyphosphoniumjodid (A. 326, 166 C. 1903 [1] 762).

## — 13 VI —

- $C_{13}H_{13}ONClSP$  1) Benzylmonamid d. Phenylthiophosphorsäuremonoehlorid. Fl. (A. 326, 205 C. 1903 [1] 821).

 **$C_{14}$ -Gruppe.**

- $C_{14}H_{10}$  \*1) Anthracen (D.R.P. 141186 C. 1903 [1] 1197).  
 \*3) Phenanthren (B. 37, 4145 C. 1904 [2] 1655).
- $C_{14}H_{12}$  \*2)  $\alpha\alpha$ -Diphenyläthen (B. 37, 1449 C. 1904 [1] 1352).  
 \*3) Stilben. Sm. 124—125° (B. 36, 1194 C. 1903 [1] 1179; B. 36, 4266 C. 1904 [1] 374; R. 21, 449 C. 1903 [1] 503; B. 37, 453 C. 1904 [1] 949).  
 9) Kohlenwasserstoff (aus Phenylpropionsäurechlorid). Sm. 95° (Soc. 85, 1325 C. 1904 [2] 1645).
- $C_{14}H_{14}$  \*1)  $\alpha\alpha$ -Diphenyläthan. Sd. 268—270° (B. 37, 1450 C. 1904 [1] 1352).  
 \*4) 2, 2'-Dimethylbiphenyl. Sm. 17,8°; Sd. 258°<sub>737</sub> (A. 332, 42 C. 1904 [2] 39).  
 \*6) 3, 3'-Dimethylbiphenyl. Sd. 283°<sub>718</sub> (B. 37, 1401 C. 1904 [1] 1443; A. 332, 43 C. 1904 [2] 39).  
 \*7) 4, 4'-Dimethylbiphenyl. Sm. 121° (122°); Sd. 295°<sub>760</sub> (B. 36, 1011 C. 1903 [1] 1078; A. 322, 44 C. 1904 [2] 39).  
 19) Tetrahydroanthracen. Sm. 89°; Sd. 309—313° (C. r. 139, 605 C. 1904 [2] 1573).
- $C_{14}H_{16}$  6) Oktahydroanthracen. Sm. 71°; Sd. 292—295°. Pikrat (C. r. 139, 605 C. 1904 [2] 1574).  
 7) Kohlenwasserstoff (aus  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Hexahydrophenyläthan). Sd. 260°<sub>755</sub> (C. r. 139, 345 C. 1904 [2] 705).  
 C 89,4 — H 10,6 — M. G. 188.
- $C_{14}H_{20}$  1)  $\gamma$ -Phenyl- $\delta$ -Oktan. Sd. 104°<sub>8</sub> (B. 36, 1406 C. 1903 [1] 1347).  
 2)  $\alpha$ -[2, 4, 6-Trimethylphenyl]- $\gamma$ -Methyl- $\alpha$ -Buten. Sd. 239—240°<sub>758</sub> (B. 37, 930 C. 1904 [1] 1209).
- $C_{14}H_{22}$  \*4) 1, 4-Dipseudobutylbenzol. Sm. 76°; Sd. 236,5° (Bl. [3] 31, 969 C. 1904 [2] 1112).  
 \*8) 1, 2, 4, 5-Tetraäthylbenzol. Sd. 248°<sub>755</sub> (B. 36, 1635 C. 1903 [2] 26).  
 13) 2-Isocamyl-1, 3, 5-Trimethylbenzol. Sd. 241—243°<sub>747</sub> (B. 37, 1720 C. 1904 [1] 1489).
- $C_{14}H_{24}$  \*9) bim.  $\beta\delta$ -Dimethyl- $\alpha\gamma$ -Pentadien. Sd. 98—100°<sub>12</sub> (B. 37, 3579 C. 1904 [2] 1376).  
 10) 2-Methyl-6-[3-Methylhexahydrophenyl]-1, 2, 3, 4-Tetrahydrobenzol. Sd. 257—259° (C. 1904 [1] 1346).

- $C_{14}H_{24}$  11) 4- $[\beta$ -Aethylbutenyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten (Diäthylcampholanden). *Sd.* 222—224° (*Bl.* [3] 31, 463 *C.* 1904 [1] 1516).
- $C_{14}H_{26}$  \*8) 3,3'-Dimethyldodekahydrobiphenyl. *Sd.* 264—266° (*B.* 37, 853 *C.* 1904 [1] 1146).
- 10) Disuberyl (Bi-R-Heptamethylenyl). *Sd.* 290—291°<sub>728</sub> (*C.* 1903 [1] 568; *A.* 327, 70 *C.* 1903 [1] 1124).
- 11) Kohlenwasserstoff (aus Butyronpinakon). *Sd.* 216—218° (*M.* 25, 125 *C.* 1904 [1] 716).
- 12) Kohlenwasserstoff (aus Petroleum). *Sd.* 160—165°<sub>00</sub> (*C.* 1904 [1] 61).

## — 14 II —

- $C_{14}H_6O_4$  2) Morphenolchinon (*B.* 33, 357). — \*III, 321.
- $C_{14}H_6O_8$  \*1) Ellagsäure.  $Na_2$ , K,  $K_2$  (*B.* 36, 212 *C.* 1903 [1] 456; *Soc.* 83, 133 *C.* 1903 [1] 89, 466; D.R.P. 137033, 137034 *C.* 1903 [1] 111).
- $C_{14}H_6Cl_4$  \*2)  $\alpha$ -Tetrachloranthracen. *Sm.* 163° (*C. r.* 135, 1122 *C.* 1903 [1] 283).
- $C_{14}H_8O_2$  \*2) 1,2-Anthrachinon (*B.* 36, 4020 *C.* 1904 [1] 168).
- $C_{14}H_8O_8$  \*2) 1-Oxy-9,10-Anthrachinon (D.R.P. 145238 *C.* 1903 [2] 1099).
- \*8) 9-Ketofluoren-2-Carbonsäure. *subl. oberh.* 275° (*M.* 25, 451 *C.* 1904 [2] 450).
- $C_{14}H_8O_4$  \*4) 1,4-Dioxy-9,10-Anthrachinon (Chinizarin) (D.R.P. 146223 *C.* 1903 [2] 1299; D.R.P. 153129 *C.* 1904 [2] 751).
- \*5) 1,5-Dioxy-9,10-Anthrachinon (D.R.P. 145238 *C.* 1903 [2] 1099).
- \*6) Chrysazin. K (D.R.P. 145238 *C.* 1903 [2] 1099; *B.* 36, 2941 *C.* 1903 [2] 886; *B.* 36, 4198 *C.* 1904 [1] 290).
- \*8) 1,7-Dioxy-9,10-Anthrachinon. *Sm.* 292—293° (*B.* 36, 4198 *C.* 1904 [1] 290).
- \*10) Anthraflavinsäure (D.R.P. 137948 *C.* 1903 [1] 268; D.R.P. 140128 *C.* 1903 [1] 903).
- \*12) 2,7-Dioxy-9,10-Phenanthrenchinon. *Sm. oberh.* 400° u. *Zers.* (*B.* 36, 3741 *C.* 1904 [1] 37; *B.* 37, 3087 *C.* 1904 [2] 1056).
- 19) 1,6-Dioxy-9,10-Anthrachinon. *Sm.* 260° (D.R.P. 145188 *C.* 1903 [2] 1037).
- 20) 3,4-Dioxy-9,10-Phenanthrenchinon (Morpholchinon) (*B.* 32, 1522, 2379 *Anm.*; 33, 352, 1810). — \*III, 318.
- 21) 4,5-Dioxy-9,10-Phenanthrenchinon. *Zers. oberh.* 400° (*B.* 36, 3750 *C.* 1904 [1] 38).
- 22) 3,4- $\beta$ -Naphtopyron-2-Carbonsäure ( $\beta$ -Naphtocumarin- $\alpha$ -Carbonsäure). *Sm.* 234° (*B.* 36, 1972 *C.* 1903 [2] 377).
- 23) Anhydrid d. 4-Acetylnaphtalin-1,8-Dicarbonsäure. *Sm.* 189° (*A.* 327, 94 *C.* 1903 [1] 1228).
- $C_{14}H_8O_5$  \*4) Flavopurpurin (D.R.P. 137948 *C.* 1903 [1] 268; D.R.P. 140127 *C.* 1903 [1] 903; D.R.P. 140129 *C.* 1903 [1] 904).
- 10) 1,2,4-Trioxy-9,10-Anthrachinon (D.R.P. 153129 *C.* 1904 [2] 751).
- 11) Anhydrid d.  $\alpha\delta$ -Di[2-Furanyl]- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. *Sm.* 187° (*Soc.* 85, 188 *C.* 1904 [1] 644, 925).
- 12) 1,2-Carbonat-3-Benzot d. 1,2,3-Trioxybenzol. *Sm.* 149° (*B.* 37, 108 *C.* 1904 [1] 584).
- $C_{14}H_8O_6$  \*12) 1,4,5,8-Tetraoxy-9,10-Anthrachinon (D.R.P. 143804 *C.* 1903 [2] 476).
- 13) 1,2,7,8-Tetraoxy-9,10-Anthrachinon (D.R.P. 103988 *C.* 1899 [2] 922). — \*III, 314.
- 14) 1,6,8,9-Tetraoxy-9,10-Anthrachinon. *Sm.* 217° (*B.* 36, 2937 *C.* 1903 [2] 885).
- 15) isom. 1,6,8,9-Tetraoxy-9,10-Anthrachinon. *Sm.* 292° (*B.* 36, 2941 *C.* 1903 [2] 886).
- $C_{14}H_8O_8$  \*1) Ruffgallussäure (*C.* 1903 [1] 398).
- 5) isom. Hexaoxy-9,10-Anthrachinon (D.R.P. 66153, 103988). — \*III, 315.
- $C_{14}H_8Br_2$  \*3)  $\alpha$ -Dibromphenanthren. *Sm.* 146° (*B.* 37, 3027 *C.* 1904 [2] 1225).
- \*7) 4,9 [oder 4,10]-Dibromphenanthren. *Sm.* 112—113° (*B.* 37, 3554 *C.* 1904 [2] 1399).
- 8) 3,9 [oder 3,10]-Dibromphenanthren. *Sm.* 146° (*B.* 37, 3576 *C.* 1904 [2] 1404).
- $C_{14}H_9N$  2) Nitril d. Fluoren-2-Carbonsäure. *Sm.* 88° (*M.* 25, 446 *C.* 1904 [2] 449).

- $C_{14}H_9N_3$  4) Verbindung (aus 3-Amido-2-Phenylindol). Sm. 115° (*C.* 1904 [1] 1357).
- $C_{14}H_{10}O$  \*2) 9-Oxyanthracen. Sm. 161° (*A.* 330, 182 *C.* 1904 [1] 892).
- \*5) 9-Oxyphenanthren. Sm. 149° (*B.* 36, 2517 *C.* 1903 [2] 507).
- 10) 1-Oxyanthracen. Sm. 152° (*B.* 37, 70 *C.* 1904 [1] 666).
- 11) 1-Phenylbenzofuran. Sm. 120–121° (*B.* 36, 3981 *C.* 1904 [1] 171; *B.* 36, 4006 *C.* 1904 [1] 175).
- 12) 2-Phenylbenzofuran. Sm. 12–13° (und 42°); Sd. 316–317°<sub>760</sub> (*B.* 36, 4004 *C.* 1904 [1] 174).
- $C_{14}H_{10}O_2$  \*9) 9,10-Dioxyphenanthren (D.R.P. 151981 *C.* 1904 [2] 167; *B.* 37, 3085 *C.* 1904 [2] 1056).
- \*16) Benzil. +  $H_2SO_4$  (*R.* 21, 355 *C.* 1903 [1] 151).
- 31)  $\alpha\beta$ -Di[4-Oxyphenyl]äthin. Sm. 220–225° (*A.* 335, 184 *C.* 1904 [2] 1130).
- 32) 1,2-Dioxyanthracen. Sm. 131° u. Zers. (*B.* 36, 4020 *C.* 1904 [1] 168).
- 33) Methyläther d. 3-Oxy-9-Ketofluoren. Sm. 99° (*B.* 35, 4278 *C.* 1903 [1] 333).
- 34) Stilbenchinon (*A.* 335, 168 *C.* 1904 [2] 1128).
- 35) 2-Acetyl- $\beta$ -Naphtofuran. Sm. 115–116° (*B.* 36, 2866 *C.* 1903 [2] 832).
- 36) 4-Methyl-1,2- $\alpha$ -Naphtopyron ( $\beta$ -Methyl- $\alpha$ -Naphtocumarin). Sm. 167° (*B.* 36, 1967 *C.* 1903 [2] 376).
- 37) 2-Methyl-3,4- $\beta$ -Naphtopyron ( $\alpha$ -Methyl- $\beta$ -Naphtocumarin). Sm. 157 bis 158° (*B.* 36, 1969 *C.* 1903 [2] 377).
- 38) Fluoren-2-Carbonsäure. Zers. oberh. 260°. Ag (*M.* 25, 448 *C.* 1904 [2] 449).
- 39) Aldehyd d. Biphenyl-4,4'-Dicarbonsäure. Sm. 145° (*A.* 332, 76 *C.* 1904 [2] 43).
- $C_{14}H_{10}O_3$  \*22) Anhydrid d. Benzolcarbonsäure (*Am.* 31, 261 *C.* 1904 [1] 1078).
- \*33) 8-Oxy-7-Methylfluoren. HCl (*M.* 25, 313 *C.* 1904 [1] 1494).
- 37) 2,3,9-Trioxyanthracen. Sm. 282° (*B.* 36, 2938 *C.* 1903 [2] 886).
- 38) Säure (aus p-Kresol). Zers. bei 100° (*B.* 36, 2032 *C.* 1903 [2] 360).
- $C_{14}H_{10}O_4$  \*2) 1,4,9,10-Tetraoxyanthracen (Leukochinizarin). Sm. 150° (153–154°) (*C.* 1904 [1] 101; D.R.P. 148792 *C.* 1904 [1] 557).
- \*20) Biphenyl-3,3'-Dicarbonsäure. Sm. 356–357° (*A.* 332, 71 *C.* 1904 [2] 42).
- 31) 2-[3-Oxybenzoyl]benzol-1-Carbonsäure. Sm. 181–182° (D.R.P. 148110 *C.* 1904 [1] 329).
- 32) Monophenylester d. Benzol-1,2-Dicarbonsäure. Sm. 103° (*B.* 35, 4092 *C.* 1903 [1] 75).
- $C_{14}H_{10}O_5$  14) 2,3,7-Trioxy-9-Methylfluoren (*B.* 37, 1177 *C.* 1904 [1] 1161; *B.* 37, 2731 *C.* 1904 [2] 541).
- $C_{14}H_{10}O_6$  \*14)  $\alpha\delta$ -Di[2-Furanyl]- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm. 185–187°.  $Na_2$  (*Soc.* 85, 190 *C.* 1904 [1] 645, 925).
- 16) 1,4,5,8,9,10-Hexaoxyanthracen (D.R.P. 148792 *C.* 1904 [1] 557).
- $C_{14}H_{10}N_2$  10) Bis-anhydro-2-Amidobenzaldehyd. Sm. 81°; Sd. 212–216°<sub>19</sub>. (2HCl, PtCl<sub>4</sub>) (*C. r.* 136, 371 *C.* 1903 [1] 635).
- $C_{14}H_{10}Br_2$  6)  $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[4-Bromphenyl]äthen. Sm. 107° (*B.* 37, 4168 *C.* 1904 [2] 1643).
- 7) isom.  $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[4-Bromphenyl]äthen. Sm. 35° (*B.* 37, 4168 *C.* 1904 [2] 1643).
- $C_{14}H_{11}N$  \*3) 9-Amidophenanthren. Sm. 137–138° (145–150°).  $HNO_3$ ,  $H_2SO_4$ , Oxalat (*B.* 36, 2515 *C.* 1903 [2] 506; *A.* 330, 165 *C.* 1904 [1] 891; *B.* 37, 3575 *C.* 1904 [2] 1404).
- \*11) 3-Methylakridin. Sm. 132,5° (*A.* 332, 92 *C.* 1904 [1] 1570).
- 26) 1-[1-Naphtyl]pyrrol. Sm. 42°; Sd. oberh. 360° (*B.* 37, 2795 *C.* 1904 [2] 531).
- 27) 1-[2-Naphtyl]pyrrol. Sm. 107°; Sd. oberh. 360° (*B.* 37, 2795 *C.* 1904 [2] 531).
- 28) 2-[2-Naphtyl]pyrrol. Sm. 155° (*B.* 37, 2796 *C.* 1904 [2] 531).
- $C_{14}H_{11}N_3$  \*5) 2,5-Diphenyl-1,3,4-Triazol. Sm. 190° (*J. pr.* [2] 69, 160 *C.* 1904 [1] 1274).
- 11) 1,5-Diphenyl-1,2,3-Triazol. Sm. 113–114°. HCl (*B.* 35, 4048 *C.* 1903 [1] 169).
- $C_{14}H_{11}N_5$  \*1) Nitril d. Formazylcarbonsäure. Sm. 158° (*J. pr.* [2] 67, 400 *C.* 1903 [1] 1346).

- $C_{14}H_{11}Cl$  5)  $\alpha$ -Phenyl- $\beta$ -[2-Chlorphenyl]äthen. Sm.  $40^\circ$ ; Sd.  $195^\circ_{22}$  (B. 35, 3970 C. 1903 [1] 31).
- $C_{14}H_{11}Br$  4) 4-Brom- $\alpha\alpha$ -Diphenyläthen. Sd.  $199-201^\circ_{13}$  (B. 37, 4168 C. 1904 [2] 1643).
- $C_{14}H_{11}O$  \*6) 3-Methyldiphenylketon. Sd.  $310-320^\circ$  (B. 37, 3360 C. 1904 [2] 1127).  
 \*8) Desoxybenzoin. Sm.  $55^\circ$  (B. 36, 1497 C. 1903 [1] 1351; B. 36, 1580 C. 1903 [1] 1398).  
 \*10) Aldehyd d. Diphenylelessigsäure. Sd.  $168-170^\circ_{10}$  (C. r. 138, 91 C. 1904 [1] 505; Bl. [3] 31, 307 C. 1904 [1] 1133).  
 18) 2-Oxy- $\alpha\alpha$ -Diphenyläthen. Sd.  $180^\circ_{22}$  (B. 36, 3999, 4003 C. 1904 [1] 174).  
 19) Phenyläther d.  $\beta$ -Oxy- $\alpha$ -Phenyläthen. Sd.  $180^\circ_{16}$  (B. 36, 4010 Anm. C. 1904 [1] 176).  
 20) 3-Acetylacenaphten. Sm.  $75^\circ$ ; Sd.  $361^\circ$ . Pikrat (A. 327, 91 C. 1903 [1] 1228).  
 21) 1-Phenyl-1,2-Dihydrobenzofuran. Sm.  $32-33^\circ$  (B. 36, 3982 C. 1904 [1] 171).  
 22) 2-Phenyl-1,2-Dihydrobenzofuran. Sm.  $38,5^\circ$ ; Sd.  $167^\circ_{14}$  (B. 36, 3984 C. 1904 [1] 171; B. 36, 4008 C. 1904 [1] 175).  
 23) Verbindung (aus Eberwurzelöl). Sd.  $158-160^\circ_{16-17}$  (A. r. 241, 46 C. 1903 [1] 713).
- $C_{14}H_{12}O_2$  \*4)  $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm.  $280-281^\circ$  u. Zers. (A. 325, 26 C. 1903 [1] 460; A. 335, 187 C. 1904 [2] 1131).  
 \*7) Benzoin. Sm.  $212^\circ$  (B. 36, 1580 C. 1903 [1] 1398; B. 36, 2829 C. 1903 [2] 1128).  
 \*13) Methyläther d. 4-Oxydiphenylketon. Sm.  $61-62^\circ$  (B. 37, 226 C. 1904 [1] 659).  
 \*32) 6-Oxy-3-Methyldiphenylketon. Sm.  $84^\circ$  (B. 36, 3892 C. 1904 [1] 93).  
 40) Verbindung (aus  $\alpha\beta$ -Di[4-Oxyphenyl]äthen). Sm.  $250^\circ$  u. Zers. (A. 325, 28 C. 1903 [1] 460).
- $C_{14}H_{12}O_3$  \*9) 2-Oxydiphenylelessigsäure (B. 36, 3999 C. 1904 [1] 174).  
 \*22) Methylster d. 2-Oxybenzophenyläther-1-Carbonsäure. Sd.  $312^\circ$  (B. 37, 2368 C. 1904 [2] 344).  
 \*41) Phenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm.  $92-93^\circ$  (D.R.P. 46756). — \*II, 920.  
 \*43) Benzylester d. 2-Oxybenzol-1-Carbonsäure (D.R.P. 144002 C. 1903 [2] 1040).  
 44)  $\alpha$ -Keto- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm.  $214-215^\circ$  (A. 325, 75 C. 1903 [1] 463).  
 45) Monomethyläther d. 4,4'-Dioxydiphenylketon. Sm.  $151-152^\circ$  (B. 36, 3900 C. 1904 [1] 94).  
 46) Methyläther d. 2-[4-Oxybenzyl]-1,4-Benzochinon. Sm.  $43^\circ$  (B. 37, 3488 C. 1904 [2] 1301).  
 47) Aldehyd d. 3,4-Dioxybenzol-3-Benzyläther-1-Carbonsäure. Sm.  $113-114^\circ$  (D.R.P. 82816). — \*III, 74.  
 48) Aldehyd d. 3,4-Dioxybenzol-4-Benzyläther-1-Carbonsäure. Sm.  $122^\circ$  (D.R.P. 82816). — \*III, 74.  
 49) Phenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm.  $48^\circ$  (D.R.P. 46756). — \*II, 919.  
 50) Acetat d. 2-Oxydiphenyläther. Sd.  $358-360^\circ$  (Am. 29, 127 C. 1903 [1] 705).
- $C_{14}H_{12}O_4$  33) Benzyl-2,3,4-Trioxypheylketon. Sm.  $141-142^\circ$  (D.R.P. 50450, 50451). — \*III, 165.  
 34) Aethylster d. 6-Phenyl-1,2-Pyron-3-Carbonsäure. Sm.  $107-108^\circ$  (B. 36, 3670 C. 1903 [2] 1313).  
 35) Verbindung (aus d. 4,4'-Diamido-3,3'-Dioxybiphenyldimethyläther) (Soc. 83, 692 C. 1903 [2] 39).
- $C_{14}H_{12}O_6$  14) Diacetat d. 5,7-Dioxy-2-Methyl-1,4-Benzpyron. Sm.  $149^\circ$  (B. 37, 2101 C. 1904 [2] 122).  
 15) Diacetat d. 7,8-Dioxy-2-Methyl-1,4-Benzpyron. Sm.  $120^\circ$  (B. 36, 2192 C. 1903 [2] 384).

- $C_{14}H_{12}O_{16}$  C 38,5 — H 2,7 — O 58,7 — M. G. 436.  
 1) Hexahydrobenzol-1,1,2,2,4,4,5,5-Oktocarbonsäure. Sm. 218 bis 220° u. Zers.  $Ag_8$  (*Soc.* 83, 783 *C.* 1903 [2] 201, 439).
- $C_{14}H_{12}N_2$  \*6) 2-[4-Methylphenyl]indazol (*C. r.* 138, 1276 *C.* 1904 [2] 120).  
 \*19) 3,8-Dimethyldiphenazon. Sm. 188°.  $HNO_3$  (*B.* 37, 26 *C.* 1904 [1] 523).  
 \*20) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -Phenylessigsäure. Sm. 84–85° (D.R.P. 142559 *C.* 1903 [2] 81; *B.* 37, 4079 *C.* 1904 [2] 1722; *B.* 37, 4084 *C.* 1904 [2] 1723).  
 29)  $\alpha\beta$ -Di[4-Amidophenyl]äthin. Sm. 235°. 2HCl,  $H_2SO_4$  (*A.* 325, 72 *C.* 1903 [1] 463).  
 30) 9-Hydrazidophenanthren. Sm. 220–221° u. Zers. (*B.* 36, 2515 *C.* 1903 [2] 506).  
 31) 2-Methyl-5-Phenylbenzimidazol. Sm. 116° (*B.* 37, 882 *C.* 1904 [1] 1143).
- $C_{14}H_{12}N_4$  12) 5-Amido-1,4-Diphenyl-1,2,3-Triazol. Sm. 169°. HCl (*B.* 35, 4058 *C.* 1903 [1] 171).  
 13) 3-Amido-1,5-Diphenyl-1,2,4-Triazol. Sm. 154,5° (*Am.* 29, 76 *C.* 1903 [1] 523).
- $C_{14}H_{12}N_6$  C 63,6 — H 4,5 — N 31,8 — M. G. 264.  
 1) 3,6-Di[3-Amidophenyl]-1,2,4,5-Tetrazin. Sm. 266–267°. 2HNO<sub>3</sub> + 3H<sub>2</sub>O (*B.* 35, 3937 *C.* 1903 [1] 38).
- $C_{14}H_{13}N$  26) 1,3-Dimethylcarbazol. Sm. 95°. Pikrat (*A.* 332, 91 *C.* 1904 [1] 1570).
- $C_{14}H_{13}N_3$  19) 5-Amido-2-Methyl-1-Phenylbenzimidazol. Sm. 145–146° (*J. pr.* [2] 69, 42 *C.* 1904 [1] 521).  
 20) 7-Amido-2-Methyl-5-Phenylbenzimidazol. Sm. 94° (*B.* 37, 883 *C.* 1904 [1] 1143).  
 21) 4,6-Dimethyl-2-Phenyl-2,1,5-Benztriazol + H<sub>2</sub>O. Sm. 150° (154° wasserfrei) (*B.* 36, 521 *C.* 1903 [1] 649).
- $C_{14}H_{13}J_8$  3) P-Joddi[3-Methylphenyl]jodoniumjodid. Sm. 105° (*A.* 327, 283 *C.* 1903 [2] 351).
- $C_{14}H_{14}O$  \*2)  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 66–67° (*B.* 37, 456 *C.* 1904 [1] 949).  
 \*3) 4-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm. 57–58° (*B.* 36, 4012 *C.* 1904 [1] 176).  
 27) 2-Oxy- $\alpha\alpha$ -Diphenyläthan. Sd. 177–178°<sub>19</sub> (*B.* 36, 4009 *C.* 1904 [1] 175).  
 28) 2-Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 83,5° (*B.* 36, 3982 *C.* 1904 [1] 171).  
 29) 4-Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 100–101° (*B.* 36, 4009 *C.* 1904 [1] 175).  
 30) Phenol (aus 2-Phenyl-1,2-Dihydrobenzofuran). Sm. 63° (*B.* 36, 3985 *C.* 1904 [1] 171).  
 31) Äthyläther d. 3-Oxybiphenyl. Sm. 34°; Sd. 305° (310°) (*B.* 36, 4075 *C.* 1904 [1] 267; *B.* 36, 4085 *C.* 1904 [1] 268).  
 32) Phenyläther d.  $\beta$ -Oxyäthylbenzol. Sd. 166°<sub>14</sub> (*C. r.* 138, 1049 *C.* 1904 [1] 1493).
- $C_{14}H_{14}O_2$  \*1) i-Hydrobenzoin. Sm. 136° (134°) (*B.* 36, 1576 *C.* 1903 [1] 1397; *B.* 37, 1677 *C.* 1904 [1] 1522).  
 \*4)  $\alpha\alpha$ -Di-[4-Oxyphenyl]äthan. Sm. 122,9° (126°). + C<sub>6</sub>H<sub>6</sub>O (*A.* 325, 29 *C.* 1903 [1] 460; *C.* 1904 [1] 1650).  
 \*8) 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 155° (*Am.* 31, 127 *C.* 1904 [1] 809).  
 \*11) Dimethyläther d. 2,2'-Dioxybiphenyl. Sm. 154° (*A.* 332, 62 *C.* 1904 [2] 41).  
 \*14) Dimethyläther d. 4,4'-Dioxybiphenyl. Sm. 172° (*Am.* 31, 127 *C.* 1904 [1] 809; *A.* 332, 67 *C.* 1904 [2] 42).  
 \*18) 6-Oxy-4-Keto-2-[ $\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol (*B.* 36, 2339 *C.* 1903 [2] 438).  
 31) Äthyläther d. Methyl-4-Oxy-1-Naphtylketon. Sm. 78–79°; Sd. 320° u. ger. Zers. (*B.* 23, 1209; 28, 1947). — III, 174; \*III, 141.  
 32) Äthylester d. Benznorcaradiäncarbonsäure. Sd. 163–164°<sub>11</sub> (*B.* 36, 3504 *C.* 1903 [2] 1273).
- $C_{14}H_{14}O_8$  15) 4'-Methyläther d. 2,5,4'-Trioxydiphenylmethan. Sm. 126°; Sd. 271°<sub>16</sub> (*B.* 37, 3487 *C.* 1904 [2] 1301).  
 16) 5-Acetyl-4,6-Diketo-2-Phenylhexahydrobenzol. Sm. 104°. Cu (*B.* 37, 3382 *C.* 1904 [2] 1219).

- $C_{14}H_{14}O_8$  17)  $\alpha$ -Oxyisopropyl-1-Oxy- $\beta$ -Naphthylketon. Sm. 127—128° (D. R. P. 80986). — \*III, 143.  
 18)  $\alpha$ -Oxyisopropyl-2-Oxy- $\beta$ -Naphthylketon. Sm. 122—123° (D. R. P. 80986). — \*III, 143.  
 19) 2-Oxynaphthalinpropyläther-1-Carbonsäure. Sm. 79°; Zers. bei 145° (C. r. 136, 618 C. 1903 [1] 881; Bl. [3] 31, 33 C. 1904 [1] 519).  
 20) Acetat d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol. Sd. 200°<sub>14</sub> (B. 37, 3382 C. 1904 [2] 1219).  
 21) Acetat d. 7-Oxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran (B. 37, 1792 C. 1904 [1] 1612).
- $C_{14}H_{14}O_5$  9) Trimethyläther d. Purpurogallin. Sm. 174—177° (Soc. 83, 196 C. 1903 [1] 401, 639).  
 10) Laktone d.  $\alpha$ -Oxy- $\alpha$ -Phenylpropan- $\beta$ -Ketocarbonsäure- $\beta$ -Carbon-säureäthylester. Fl. (B. 31, 196). — \*II, 1172.  
 11) Äthylester d.  $\gamma$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha$ -Buten-3,4-Methylen-äther- $\beta$ -Carbonsäure. Sm. 83° (B. 37, 1703 C. 1904 [1] 1497).
- $C_{14}H_{14}O_8$  10) Tetraacetat d. 1,2,3,4-Tetraoxybenzol. Sm. 136° (B. 37, 120 C. 1904 [1] 586).
- $C_{14}H_{14}N_2$  \*32) 2,2'-Dimethylazobenzol. Sm. 75° (C. 1904 [2] 1383).  
 \*37) 4,4'-Dimethylazobenzol. Sm. 144° (C. 1904 [2] 1383).  
 49) 4-[4-Amidobenzyliden]amido-1-Methylbenzol (D. R. P. 106719). — \*III, 23.  
 50)  $\alpha$ -Benzyliden- $\beta$ -[2-Methylphenyl]hydrazin. Sm. 100—102° (C. 1903 [2] 1432).  
 51)  $\alpha$ -Benzyliden- $\beta$ -[4-Methylphenyl]hydrazin. Sm. 114° (C. 1903 [2] 1432).  
 52) 2-Methyl-1-Aethyl- $\beta$ -Naptimidazol. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Chromat, Pikrat (Soc. 83, 1197 C. 1903 [2] 1445).  
 53) 2-Methyl-N-Aethyl- $\alpha$ -oder- $\beta$ -Naptimidazol. Sm. 84°. (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (Soc. 83, 1193 C. 1903 [2] 1444).
- $C_{14}H_{14}N_4$  \*6) Di[2-Amidobenzyliden]hydrazin. Sm. 248° (M. 25, 374 C. 1904 [2] 322).  
 \*9)  $\alpha$ -Phenylazo- $\alpha$ -Phenylhydrazonäthan (Methylformazyl). Sm. 123 bis 123,5° (B. 36, 87 C. 1903 [1] 452).
- $C_{14}H_{14}N_6$  3) 3,6-Di[3-Amidophenyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 179 bis 190° (B. 35, 3936 C. 1903 [1] 38).
- $C_{14}H_{14}Cl_2$  1) Dichlorhexahydroanthracen. Sm. 159° (C. r. 139, 606 C. 1904 [2] 1574).
- $C_{14}H_{14}Br_2$  2) Dibromhexahydroanthracen. Sm. 162° (C. r. 139, 606 C. 1904 [2] 1574).
- $C_{14}H_{14}J_2$  3) 4-Aethyldiphenyljodoniumjodid. Sm. 160° (A. 327, 292 C. 1903 [2] 352).  
 4) Di[3-Methylphenyl]jodoniumjodid. Sm. 155° (A. 327, 274 C. 1903 [2] 350).  
 5) 2,3'-Dimethyldiphenyljodoniumjodid. Sm. 150° (A. 327, 279 C. 1903 [2] 351).  
 6) 3,4'-Dimethyldiphenyljodoniumjodid. Sm. 143° (A. 327, 281 C. 1903 [2] 351).
- $C_{14}H_{14}S$  \*1) Dibenzylsulfid (B. 36, 538 C. 1903 [1] 706).  
 $C_{14}H_{14}S_2$  \*5) Dibenzyldisulfid (B. 36, 539 C. 1903 [1] 707).  
 $C_{14}H_{14}S_3$  4) Dimethyläther d. Di[4-Merkaptophenyl]sulfid. Sm. 89° (R. 22, 362 C. 1904 [1] 23).
- $C_{14}H_{15}N$  21)  $\alpha$ -Phenylamidoäthylbenzol. Sd. 183°<sub>20</sub>. HCl, H<sub>2</sub>SO<sub>4</sub> (B. 37, 2691 C. 1904 [2] 519).
- $C_{14}H_{15}N_3$  \*17) 4'-Amido-2,3'-Dimethylazobenzol (J. pr. [2] 69, 321 C. 1904 [2] 34).  
 38)  $\alpha$ -Phenyl- $\beta$ -[2-Methylamidobenzyliden]hydrazin. Sm. 123—124° (B. 36, 4187 C. 1904 [1] 279).  
 39)  $\beta$ -Phenylhydrazon- $\beta$ -Amido- $\alpha$ -Phenyläthan. Sm. 70°. HCl (B. 36, 2485 C. 1903 [2] 490).  
 40) 2-Methylamido-1-Phenylhydrazonmethylbenzol. Sm. 124,5—125,5° (B. 37, 984 C. 1904 [1] 1079).  
 41) 4-Benzylidenhydrazido-2,6-Dimethylpyridin. Sm. 220—224° u. Zers. HCl, HNO<sub>3</sub> (B. 36, 1117 C. 1903 [1] 1185).

- $C_{14}H_{16}O$  \*3) 3-Keto-4-Benzyliden-1-Methylhexahydrobenzol. Sm. 59°; Sd. 190 bis 200°<sub>13</sub> (C. r. 136, 1225 C. 1903 [2] 116).
- $C_{14}H_{16}O_2$  12) Aethylester d. 1-[ $\beta$ -Phenyläthenyl]-R-Trimethylen-2-Carbonsäure. Sm. 42—43° (B. 37, 2104 C. 1904 [2] 104).
- $C_{14}H_{16}O_4$  15) Diäthyläther d. 5,7-Dioxy-4-Methyl-2,1-Benzpyron. Sm. 131° (D. R. P. 73700). — \*II, 1126.
- 16)  $\alpha$ -Acetoxy- $\alpha$ -Phenyl- $\alpha$ -Buten- $\beta$ -Methylcarbonsäure (C. 1904 [1] 1258).
- 17) Dimethylester d.  $\alpha$ -Phenyl- $\beta$ -Buten- $\delta\delta$ -Dicarbonsäure. Sd. 187°<sub>12</sub> (B. 37, 3122 C. 1904 [2] 1217).
- $C_{14}H_{16}O_5$  21) Mekoninmethyläthylketon. Sm. 128—132° (M. 25, 1052 C. 1904 [2] 1644).
- $C_{14}H_{16}O_6$  19) Diacetat d. 3,6-Dioxy-2,5-Diäthyl-1,4-Benzochinon. Sm. 130° (B. 37, 2386 C. 1904 [2] 307).
- $C_{14}H_{16}N_2$  \*16) 4-Amido-3-[4-Methylphenyl]amido-1-Methylbenzol. Sm. 107° (B. 36, 341 C. 1903 [1] 633).
- \*24) 4,4'-Diamido-3,3'-Dimethylbiphenyl. Oxalat (B. 37, 1401 C. 1904 [1] 1443; M. 25, 383 C. 1904 [2] 320).
- \*27) s-Di[2-Methylphenyl]hydrazin (B. 36, 340 C. 1903 [1] 633).
- \*29) s-Di[4-Methylphenyl]hydrazin (B. 36, 340 C. 1903 [1] 633).
- \*40) 4-Amido-2-Benzylamido-1-Methylbenzol (Benzyl-5-Amido-2-Methylphenylamin). Sm. 80° (D. R. P. 141297 C. 1903 [1] 1163).
- 41) 4,4'-Di[Methylamido]biphenyl. Sm. 74—76°. 2HCl (B. 37, 3773 C. 1904 [2] 1548).
- $C_{14}H_{16}N_4$  20)  $\alpha\beta$ -Di[2,4-Diamidophenyl]äthen. Sm. 191° (B. 37, 3600 C. 1904 [2] 1500).
- 21)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylhydrazidoäthan. HCl (B. 36, 2483 C. 1903 [2] 490).
- 22) p-Diamido-3,p-Dimethylazobenzol (J. pr. [2] 68, 307 C. 1903 [2] 1143).
- $C_{14}H_{16}Cl_2$  1) Dichloroktohydroanthracen. Sm. 192° (C. r. 139, 606 C. 1904 [2] 1574).
- $C_{14}H_{16}Br_2$  1) Dibromoktohydroanthracen. Sm. 194° (C. r. 139, 605 C. 1904 [2] 1574).
- $C_{14}H_{17}N_3$  \*9) 4-Amido-4'-Dimethylamidodiphenylamin. Sm. 116°. 2HCl, H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 69, 223 C. 1904 [1] 1268).
- 10) Di[ $\beta$ -2-Pyridyläthyl]amin. Fl. 3 [2HCl, PtCl<sub>4</sub>] + 2H<sub>2</sub>O, 3 Pikrat (B. 37, 173 C. 1904 [1] 673).
- $C_{14}H_{17}Cl$  1) Chloroktohydroanthracen (C. r. 139, 606 C. 1904 [2] 1574).
- $C_{14}H_{17}Br$  1) Bromoktohydroanthracen. Fl. (C. r. 139, 606 C. 1904 [2] 1574).
- $C_{14}H_{18}O$  6)  $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]- $\alpha$ -Penten. Sm. 32—33°; Sd. 170°<sub>17</sub> (A. 330, 257 C. 1904 [1] 946).
- 7)  $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methyl- $\alpha$ -Buten. Sd. 171,5°<sub>17</sub> (A. 330, 261 C. 1904 [1] 947).
- $C_{14}H_{18}O_2$  13) Aethyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Hexen. Sd. 155—158°<sub>10</sub> (C. r. 139, 206 C. 1904 [2] 649).
- 14) Benzoat d.  $\alpha$ -Oxy- $\alpha$ -Hepten. Sd. 195°<sub>50</sub> (Soc. 83, 153 C. 1903 [1] 72, 436).
- 15) Benzoat d. 2-Oxy-1-Methylhexahydrobenzol. Fl. (C. 1904 [1] 1346).
- $C_{14}H_{18}O_3$  19) Aethylester d.  $\beta$ -Benzoylbutan- $\alpha$ -Carbonsäure. Sd. 175°<sub>20</sub> (C. 1904 [1] 1258).
- $C_{14}H_{18}O_4$  \*18) Diäthyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2,4-Dioxyphenyl]butan. Cu (B. 37, 355 C. 1904 [1] 670).
- 28) Diisopropylester d. Benzol-1,2-Dicarbonsäure (G. 28 [2] 503). — \*II, 1047.
- 29) Isobutylester d. 1- $\alpha$ -Benzoxylpropionsäure. Sd. 163—164°<sub>11</sub> (C. 1903 [2] 1419).
- $C_{14}H_{18}O_5$  13) 6-Ketododekahydrobiphenylen-3,4'-Dicarbonsäure. Sm. 170° (Soc. 85, 429 C. 1904 [1] 1082, 1439).
- 14)  $\beta$ -Ketopropylester d. 3,5-Dioxybenzoldiäthyläther-1-Carbonsäure. Sm. 65° (D. R. P. 73700). — \*II, 1030.
- $C_{14}H_{18}O_6$  18) 2,5-Diacetat d. 2,3,5,6-Tetraoxy-1,4-Diäthylbenzol. Sm. 205° (B. 37, 2387 C. 1904 [2] 307).
- $C_{14}H_{18}O_7$  5) Diäthylester d. 6-Oxy-1,4-Dihydrobenzol-1,3-Dicarbonsäure-4-Methylcarbonsäure. Sm. 112—113° (B. 37, 2118 C. 1904 [2] 438).

- $C_{14}H_{18}O_7$  6) Diäthylester d. Glutakonylglutakonsäure. Sm. 98—99° (*C. r.* 136, 693 *C.* 1903 [1] 960).  
 $C_{14}H_{18}N_2$  \*7) 5-Amyl-3-Phenylpyrazol. Sm. 76° (*C. r.* 136, 1264 *C.* 1903 [2] 122).  
 $C_{14}H_{18}N_4$  9) 2,4-Diamido-4'-Dimethylamidodiphenylamin<sup>9</sup>. Sm. 70—75° (*J. pr.* [2] 69, 230 *C.* 1904 [1] 1269).  
 $C_{14}H_{20}O$  10)  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Hexahydrophenyläthan. Sd. 168°<sub>20</sub> (*C. r.* 139, 345 *C.* 1904 [2] 705).  
 11) Methyläther d.  $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Hepten. Sd. 179°<sub>16</sub> (*B.* 37, 4002 *C.* 1904 [2] 1641).  
 12)  $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]pentan. Sd. 160—164°<sub>17</sub> (*A.* 330, 259 *C.* 1904 [1] 947).  
 13)  $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylbutan. Sd. 155,5°<sub>16</sub> (*A.* 330, 263 *C.* 1904 [1] 947).  
 14) Isobutyl-2,4,6-Trimethylphenylketon. Sd. 151°<sub>20</sub> (*B.* 37, 929 *C.* 1904 [1] 1209).  
 15) Methyl-2,4,5-Triäthylphenylketon. Sd. 146°<sub>13</sub> (*B.* 36, 1635 *C.* 1903 [2] 26).  
 $C_{14}H_{20}O_2$  16)  $\alpha$ -Oxyisopropyl-2-Methyl-5-Isopropylphenylketon. Sd. 157°<sub>16</sub> (*C.* 1899 [1] 959) — \*III, 126.  
 17) 2,5-Dipseudobutyl-1,4-Benzochinon. Sm. 152,5° (*Bl.* [3] 31, 970 *C.* 1904 [2] 1113).  
 18) Äthylester d. 3-tert. Butyl-1-Methylbenzol-5-Carbonsäure. Sd. 268—270°<sub>743</sub> (*C.* 1904 [1] 1498).  
 $C_{14}H_{20}O_3$  32) Lakton d.  $\beta$ -Oxypropylcamphocarbonsäure. Sm. 141° (*C. r.* 136, 792 *C.* 1903 [1] 1086).  
 33) Allylester d. Camphocarbonsäure. Sd. 160—170°<sub>20</sub> (*C. r.* 136, 240 *C.* 1903 [1] 584).  
 $C_{14}H_{20}O_4$  7) Methyllester d. Acetylcamphocarbonsäure. Sd. 142°<sub>12</sub> (*B.* 35, 4032 *C.* 1903 [1] 81).  
 8) Äthylester d.  $\alpha$ -Oxy- $\alpha$ -[4-Methoxyphenyl]- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 71° (*C.* 1903 [2] 566).  
 $C_{14}H_{20}O_6$  3) 4-Keto-1,3-Diacetyl-1,3,5-Tri[Oxymethyl]-6-Methyl-1,2,3,4-Tetrahydrobenzol + xH<sub>2</sub>O. Sm. 110° (122° wasserfrei) (*B.* 36, 2176 *C.* 1903 [2] 371).  
 $C_{14}H_{20}O_8$  \*2) Tetraäthylester d. Äthentetracarbonsäure.. Sm. 56—58°; Sd. 227 bis 233°<sub>15</sub> (*J. pr.* [2] 68, 159 *C.* 1903 [2] 759; *Soc.* 85, 613 *C.* 1904 [1] 1553).  
 $C_{14}H_{20}O_9$  6) Säure (aus Cholesterin). C<sub>24</sub> + 2H<sub>2</sub>O (*M.* 24, 190 *C.* 1903 [2] 21).  
 $C_{14}H_{20}O_{10}$  2) Pentamethylester d. Butan- $\alpha\alpha\beta\gamma\delta$ -Pentacarbonsäure. Sm. 95—96° (*B.* 36, 3293 *C.* 1903 [2] 1167).  
 $C_{14}H_{20}Br_2$  \*2) 3,6-Dibrom-1,2,4,5-Tetraäthylbenzol. Sm. 113° (*B.* 36, 1635 *C.* 1903 [2] 26).  
 3)  $\gamma\delta$ -Dibrom- $\delta$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylbutan. Fl. (*B.* 37, 930 *C.* 1904 [1] 1209).  
 4) 4,6-Dibrom-2-Isocamyl-1,3,5-Trimethylbenzol. Sm. 44° (*B.* 37, 1720 *C.* 1904 [1] 1489).  
 $C_{14}H_{21}Cl$  3)  $\delta$ -Chlor- $\delta$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylbutan. Fl. (*B.* 37, 930 *C.* 1904 [1] 1209).  
 $C_{14}H_{22}O$  \*17)  $\alpha$ -Methyljonon. Sd. 137—142°<sub>15</sub> (D.R.P. 150827 *C.* 1904 [1] 1379).  
 \*18)  $\beta$ -Methyljonon. Sd. 145—151°<sub>15</sub> (D.R.P. 150827 *C.* 1904 [1] 1379).  
 \*19) Methylpseudojonon (D.R.P. 150771 *C.* 1904 [1] 1307).  
 20) isom.  $\alpha$ -Methyljonon. Sd. 135—140°<sub>16</sub> (D.R.P. 150827 *C.* 1904 [1] 1379).  
 21) isom.  $\beta$ -Methyljonon. Sd. 135—140°<sub>16</sub> (D.R.P. 150827 *C.* 1904 [1] 1379).  
 22)  $\delta$ -Oxy- $\delta$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylbutan. Sd. 164°<sub>21</sub> (*B.* 37, 930 *C.* 1904 [1] 1209).  
 23) 5-[ $\alpha$ -Oxyäthyl]-1,2,4-Triäthylbenzol. Sm. 45°; Sd. 149°<sub>13</sub> (*B.* 36, 1635 *C.* 1903 [2] 26).  
 24) Methyläther d.  $\alpha$ -[2-Oxyphenyl]heptan. Sd. 153—155°<sub>20</sub> (*B.* 37, 4002 *C.* 1904 [2] 1642).  
 25) Alstonin. Sm. 191—192° (*B.* 37, 4113 *C.* 1904 [2] 1656).  
 26) Isoalstonin. Sm. 163° (*B.* 37, 4113 *C.* 1904 [2] 1656).

- $C_{14}H_{22}O_2$  16)  $\alpha\gamma$ -Dioxy- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylpropan. Sm. 58°; Sd. 210°<sub>22</sub> (M. 24, 252 C. 1903 [2] 242).  
 16) Dipropyläther d.  $\alpha\alpha$ -Dioxy- $\alpha$ -Phenyläthan (B. 31, 1012). — \*III, 91.  
 17) Butyrylcampher. Sd. 146°<sub>13</sub> (B. 36, 2639 C. 1903 [2] 627; B. 37, 762 C. 1904 [1] 1085).  
 18) Cyklamiretin. Sm. 215° (B. 36, 1765 C. 1903 [2] 119).  
 19) Aethylester d. Cyklocitrylidenessigsäure. Sd. 141°<sub>17</sub> (D.R.P. 153575 C. 1904 [2] 678).  
 20) Bornylester d. Crotonsäure. Sd. 173°<sub>19</sub> (C. r. 136, 238 C. 1903 [1] 584).
- $C_{14}H_{22}O_3$  22) 2,5-Dimethyläther-3-Propyläther d. 2,3,5-Trioxy-1-Propylbenzol. Sd. 156—157°<sub>12</sub> (B. 36, 1720 C. 1903 [2] 114).  
 23) Methylester d.  $\alpha$ -Aethylcamphocarbonsäure. Sm. 60° (C. r. 137, 1067 C. 1904 [1] 283).  
 24) Methylester d.  $\beta$ -Aethylcamphocarbonsäure. Sd. 162°<sub>10</sub> (C. r. 137, 1068 C. 1904 [1] 283).  
 25) Propylester d. Camphocarbonsäure. Sd. 170°<sub>19</sub> (C. r. 136, 240 C. 1903 [1] 584).  
 26) Verbindung (aus Guttapercha). Sm. 120—130° (C. 1903 [1] 84).
- $C_{14}H_{22}O_4$  \*3) Digitogensäure (B. 37, 1216 C. 1904 [1] 1363).  
 11)  $\beta$ -Oxypropylcamphocarbonsäure (C. r. 136, 792 C. 1903 [1] 1086).  
 12) Diacetat d. 5,7-Dioxy-1-Methylbicyclo-[1,3,3]-Nonan. Fl. (B. 37, 1674 C. 1904 [1] 1607).
- $C_{14}H_{22}O_5$  5) 2,4,5-Trimethyläther-1,1-Diäthyläther d. 2,4,5-Trioxy-1-Dioxy-methylbenzol. Sm. 101,5° (Ar. 242, 103 C. 1904 [1] 1008).
- $C_{14}H_{22}O_6$  \*1) Diäthylester d. 3,5-Dioxy-1,3-Dimethyl-1,2,3,4-Tetrahydrobenzol-2,6-Dicarbonsäure. Sm. 60—63°. Na +  $C_2H_5O$  (B. 32, 89; A. 332, 26 C. 1904 [1] 1566).  
 \*4) Diäthylester d. 5-Keto-1-Oxy-1,3-Dimethylhexahydrobenzol-2,4-Dicarbonsäure. Sm. 80° (A. 332, 25 C. 1904 [1] 1566).
- $C_{14}H_{23}Br_3$  1) 1,6,p-Tribrom-3,3'-Dimethyldodekahydrobiphenyl (C. 1904 [1] 1346).
- $C_{14}H_{24}O_2$  \*11) 1-Menthylester d. Crotonsäure. Sd. 140—140,5°<sub>14</sub> (A. 327, 172 C. 1903 [1] 1396).  
 \*13) Isobutytrat d. Isoborneol. Sd. 120°<sub>14</sub> (C. r. 136, 239 C. 1903 [1] 584).  
 14) Methylpseudojononhydrat. Sd. 186—192°<sub>12,5</sub> (D.R.P. 150771 C. 1904 [1] 1307).  
 15) isom. Methylpseudojononhydrat. Sd. 185—195°<sub>13,5</sub> (D.R.P. 150771 C. 1904 [1] 1307).  
 16) Aethylester d.  $\alpha$ -Undekin- $\alpha$ -Carbonsäure. Sd. 170—174°<sub>25</sub> (C. r. 136, 554 C. 1903 [1] 825).  
 17) Isocamylester d.  $\alpha$ -Oktin- $\alpha$ -Carbonsäure. Sd. 168—172°<sub>27</sub> (C. r. 136, 554 C. 1903 [1] 825).  
 18) 1-Menthylester d. R-Trimethylencarbonsäure. Sd. 135—135,5°<sub>14</sub> (A. 327, 182 C. 1903 [1] 1396).  
 19) Acetat d. 4- $\beta$ -Oxyisobutyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten. Sd. 118—122°<sub>19</sub> (Bl. [3] 31, 462 C. 1904 [1] 1516).  
 20) Butyrat d. d-Borneol. Sd. 120—121°<sub>10-11</sub> (D.R.P. 80711). — \*III, 337.  
 21) Butyrat d. Campholenalkohol. Sd. 252—254° (C. r. 138, 280 C. 1904 [1] 725).  
 22) Butyrat d. Isoborneol. Sd. 123°<sub>11</sub> (C. r. 136, 239 C. 1903 [1] 584).  
 23) Crotonat d. d-Citronellol. Sd. 138—140°<sub>35</sub> (C. r. 126, 1727). — \*III, 332.
- $C_{14}H_{24}O_3$  \*4) Menthylester d. Acetessigsäure (Soc. 81, 1501 C. 1903 [1] 138).  
 \*6) Menthylester d.  $\beta$ -Oxycrotonsäure. Cu (Soc. 81, 1503 C. 1903 [1] 138).
- $C_{14}H_{24}O_4$  \*6) Monomenthylester d. Bernsteinsäure. Sm. 59° (B. 37, 1379 C. 1904 [1] 1441).  
 12) Diäthylester d.  $\zeta$ -Methyl- $\alpha$ -Hepten- $\delta\eta$ -Dicarbonsäure. Sd. 155°<sub>17</sub> (C. r. 136, 1614 C. 1903 [2] 440).
- $C_{14}H_{24}O_5$  7) Diäthylester d. Oxycamphersäure. Fl. (Am. 28, 481 C. 1903 [1] 329).

- $C_{14}H_{24}O_8$  22) Diäthylester d. Dimethylmalonyloxypivalinsäure. *Sd.* 156—157°<sub>18</sub> (*Bl.* [3] 31, 163 *C.* 1904 [1] 869).
- $C_{14}H_{26}O$  3) 4- $[\beta$ -Oxy- $\beta$ -Aethylbutyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten (Diäthylcamphenol). *Sd.* 144—148°<sub>28</sub> (*Bl.* [3] 31, 463 *C.* 1904 [1] 1516).
- $C_{14}H_{26}O_2$  4) Isobutylmenthon. *Sd.* 124—128°<sub>10</sub> (*C. r.* 138, 1140 *C.* 1904 [2] 106).
- \*2) Suberopinakon. *Sm.* 75—76° (*C.* 1903 [1] 568; *A.* 327, 66 *C.* 1903 [1] 1124).
- $C_{14}H_{26}O_3$  7) Aethylester d.  $\beta$ -Ketoundekan- $\alpha$ -Carbonsäure. *Sd.* 164—165°<sub>18</sub>. *Cu* (*C. r.* 136, 755 *C.* 1903 [1] 1019).
- 8) Aethylester d.  $\beta$ -Keto- $\delta$ -Methyldekan- $\gamma$ -Carbonsäure. *Sd.* 147°<sub>12</sub> (*Bl.* [3] 31, 597 *C.* 1904 [2] 26; *Bl.* [3] 31, 759 *C.* 1904 [2] 309).
- 9) Propylester d.  $\beta$ -Oxy- $\alpha$ -Heptenpropyläther- $\alpha$ -Carbonsäure. *Sd.* 279 bis 280° (*C. r.* 138, 208 *C.* 1904 [1] 659; *Bl.* [3] 31, 513 *C.* 1904 [1] 1602).
- $C_{14}H_{26}O_4$  \*4) Diäthylester d. Oktan- $\alpha$ - $\beta$ -Dicarbonsäure (*M.* 24, 621 *C.* 1903 [2] 1236).
- 26)  $\alpha$ -Acetoxylundekan- $\alpha$ -Carbonsäure. *Sm.* 47° (*Bl.* [3] 29, 1126 *C.* 1904 [1] 261).
- 27) Diäthylester d.  $\beta$ -Methylheptan- $\gamma$ - $\zeta$ -Dicarbonsäure. *Sd.* 158°<sub>19</sub> (*C. r.* 136, 458 *C.* 1903 [1] 696; *C.* 1904 [2] 1045).
- 28) Diaacetat d.  $\alpha$ - $\alpha$ -Dioxydekan. *Sm.* 25,5°; *Sd.* 170,5°<sub>10</sub> (*M.* 24, 630 *C.* 1903 [2] 1237).
- $C_{14}H_{26}Br_2$  1) Dibromid d. Kohlenwasserstoff  $C_{14}H_{26}$ . *Sm.* 83° (*M.* 25, 126 *C.* 1904 [1] 716).
- $C_{14}H_{27}N$  \*1) Di[3-Methylhexahydrophenyl]amin. *Sd.* 145°<sub>20</sub> (*C. r.* 138, 1258 *C.* 1904 [2] 105).
- $C_{14}H_{28}O$  9)  $\gamma$ -Ketotetradekan. *Sm.* 34°; *Sd.* 152°<sub>18</sub> (*Bl.* [3] 29, 1209 *C.* 1904 [1] 355).
- 10) Oxyd (aus Butyronpinakon). *Sd.* 243—244° (*M.* 25, 128 *C.* 1904 [1] 716).
- $C_{14}H_{28}O_2$  \*4) Aethylester d. Laurinsäure. *Sd.* 79° (*B.* 36, 4340 *C.* 1904 [1] 433).
- $C_{14}H_{28}O_3$  4) Aethylester d.  $\alpha$ -Oxyundekan- $\alpha$ -Carbonsäure. *Sm.* 43° (*Bl.* [3] 29, 1126 *C.* 1904 [1] 261).
- $C_{14}H_{30}O$  \*1)  $\alpha$ -Oxytetradekan. *Sm.* 38°; *Sd.* 160°<sub>10</sub> (*C. r.* 137, 61 *C.* 1903 [2] 551).
- $C_{14}H_{30}O_2$  4)  $\zeta$ -Aethyläther d.  $\epsilon$ - $\zeta$ -Dioxy- $\beta$ -Methyl- $\epsilon$ -Isoamylhexan. *Sd.* 143—144°<sub>26</sub> (*C. r.* 138, 91 *C.* 1904 [1] 505; *Bl.* [3] 31, 304 *C.* 1904 [1] 1133).
- $C_{14}H_{31}N$  \*1)  $\alpha$ -Amidotetradekan. *Sm.* 37° (*C.* 1903 [1] 826; *J. pr.* [2] 67, 419 *C.* 1903 [1] 1405).

## — 14 III —

- $C_{14}H_4O_2Cl_8$  \*1) 3, 5, 3', 5'-Tetrachlortolanchloridechinon. *Sm.* 249° (*A.* 325, 85 *C.* 1903 [1] 464).
- $C_{14}H_4O_2Cl_8$  \*1)  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,3,5-Trichlor-4-Keto-3,4-Dihydrophenyl]äthan. *Sm.* 185° (*A.* 325, 91 *C.* 1903 [1] 465).
- $C_{14}H_4O_2Cl_{12}$  1) Ketochlorid (aus  $\alpha\beta$ -Di[4-Amidophenyl]äthin). *Sm.* 191° (*A.* 325, 80 *Ann.* *C.* 1903 [1] 464).
- $C_{14}H_4O_2Cl_{14}$  1) Ketochlorid (aus pp-Diamidostilben). *Sm.* 150° u. *Zers.* (*A.* 325, 47 *Ann.* *C.* 1903 [1] 462).
- $C_{14}H_4O_4Br_4$  4) p-Tetrabrom-1,6-Dioxy-9,10-Anthrachinon. *Sm.* 295° (*B.* 36, 2937, 2942 *C.* 1903 [2] 885).
- $C_{14}H_4O_6Br_4$  1) 2,4,6,8-Tetrabrom-1,3,5,7-Tetraoxy-9,10-Anthrachinon (D.R.P. 155633 *C.* 1904 [2] 1487).
- $C_{14}H_4O_6Br_8$  1) Verbindung (aus 3,4,5,6-Tetrabrom-1,2-Benzochinon u. Essigsäure). *Zers.* bei 220—230° (*Am.* 31, 111 *C.* 1904 [1] 803).
- $C_{14}H_4O_4N_4$  C 37,2 — H 0,9 — O 49,5 — N 12,4 — M. G. 452.
- 1) 2,4,6,8-Tetranitro-1,3,5,7-Tetraoxy-9,10-Anthrachinon. *Zers.* bei 280—300° (D.R.P. 73605, 72552, 101486, 108420). — III, \*313.
- $C_{14}H_5O_2Cl_{11}$  1) Ketochlorid (aus pp-Diamidostilben). *Sm.* 217° u. *Zers.* (*A.* 325, 47 *Ann.* *C.* 1903 [1] 462).
- $C_{14}H_5O_2Cl_{13}$  1) Ketochlorid (aus  $\alpha\beta$ -Di[4-Amidophenyl]äthin). *Sm.* 258° (*A.* 325, 79 *Ann.*, 85 *C.* 1903 [1] 464).
- 2) isom. Ketochlorid (aus  $\alpha\beta$ -Di[4-Amidophenyl]äthin). *Sm.* 212° (*A.* 325, 79 *Ann.*, 85 *C.* 1903 [1] 464).
- $C_{14}H_5O_4Cl_8$  1) p-Trichlor-2,6-Dioxy-9,10-Anthrachinon (D.R.P. 152175 *C.* 1904 [2] 168).

- $C_{14}H_8O_2Cl_4$  \*1) 3,5,3',5'-Tetrachlorstilbenchinon (A. 325, 54 C. 1903 [1] 462).  
 2)  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthin. Sm. 226° (A. 325, 77 C. 1903 [1] 463).
- $C_{14}H_8O_2Cl_3$  \*1)  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 248° (A. 325, 78 C. 1903 [1] 464).
- $C_{14}H_8O_2Cl_3$  \*2)  $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 222° u. Zers. + 2 Molec. Essigsäure (A. 325, 82 C. 1903 [1] 464).
- $C_{14}H_8O_2Cl_{12}$  1) Ketochlorid (aus 4,4'-Dioxystilben). Sm. 223–224° (A. 325, 51 Anm. C. 1903 [1] 462).
- $C_{14}H_8O_2Br_2$  6) 2,7-Dibrom-9,10-Phenanthrenchinon. Sm. 323° (B. 37, 3559 C. 1904 [2] 1400; B. 37, 3567 C. 1904 [2] 1402).
- $C_{14}H_8O_2Br_4$  2) 3,5,3',5'-Tetrabromstilbenchinon (Tetrabromdibenzylidenchinon). Zers. oberh. 300°. NaOH, KOH (A. 325, 34 C. 1903 [1] 460).
- $C_{14}H_8O_4Cl_2$  4) p-Dichlor-2,6-Dioxy-9,10-Anthrachinon (D.R.P. 152175 C. 1904 [2] 168).  
 5) p-Dichlor-2,7-Dioxy-9,10-Anthrachinon (D.R.P. 152175 C. 1904 [2] 168).
- $C_{14}H_8O_4Cl_4$  1)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[2,5-Dichlor-4-Oxyphenyl]äthan. Sm. 275° (J. pr. [2] 59, 233). — \*III, 224.  
 2)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. noch nicht bei 300° (A. 325, 88 C. 1903 [1] 464).
- $C_{14}H_8O_4Br_2$  7) isom. p-Dibrom-1,6-Dioxy-9,10-Anthrachinon. Sm. 210–213° (B. 36, 2937 C. 1903 [2] 885).  
 8) p-Dibrom-2,3-Dioxy-9,10-Anthrachinon. Sm. 127–129° (B. 36, 2939 C. 1903 [2] 886).
- $C_{14}H_8O_4Br_4$  1)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. noch nicht bei 270° (A. 325, 90 C. 1903 [1] 465).
- $C_{14}H_8O_6N_2$  \*4) 2,7-Dinitro-9,10-Phenanthrenchinon. Sm. 301–303° (B. 36, 3739 C. 1904 [1] 36; B. 37, 3085 C. 1904 [2] 1056).  
 \*7) 4,5-Dinitro-9,10-Phenanthrenchinon. Sm. 228° (B. 36, 3745 C. 1904 [1] 37).  
 8) isom. Dinitro-9,10-Anthrachinon. Sm. bei 300° (D.R.P. 72685). — \*III, 296.
- $C_{14}H_8O_6Br_2$  1) p-Dibrom-1,3,5,7-Tetraoxy-9,10-Anthrachinon (D.R.P. 78642, 81962). — \*III, 312.
- $C_{14}H_8O_6N_2$  6) 1,4-Dinitro-2,3-Dioxy-9,10-Anthrachinon. Ca, Ba (B. 36, 2940 C. 1903 [2] 886).  
 C 40,2 — H 1,4 — O 38,3 — N 20,1 — M. G. 418.
- $C_{14}H_8O_{10}N_6$  1) 2,4,6,8-Tetranitro-1,5-Diamido-9,10-Anthrachinon (D.R.P. 148109 C. 1904 [1] 230).
- $C_{14}H_6N_2Cl_2$  1) Nitril d. 3,3'-Dichlorbiphenyl-4,4'-Dicarbonsäure. Sm. 152–153° (Soc. 85, 9 C. 1904 [1] 376, 729).
- $C_{14}H_7O_2Cl$  \*1) 2-Chlor-9,10-Anthrachinon. Sm. 208–209° (B. 37, 62 C. 1904 [1] 520).  
 $C_{14}H_7O_2Br$  \*2) 2-Brom-9,10-Anthrachinon. Sm. 204–205° (B. 37, 61 C. 1904 [1] 520).  
 \*3) 4-Brom-9,10-Phenanthrenchinon. Sm. 126° (B. 37, 3554 C. 1904 [2] 1399).  
 4) 2-Brom-9,10-Phenanthrenchinon. Sm. 233–234° (B. 37, 3558 C. 1904 [2] 1400).  
 5) 3-Brom-9,10-Phenanthrenchinon. Sm. 268° (B. 37, 3571 C. 1904 [2] 1403).
- $C_{14}H_7O_2J$  1) 2-Jod-9,10-Anthrachinon. Sm. 175–176° (B. 36, 60 C. 1904 [1] 520).  
 $C_{14}H_7O_2Cl$  1) 3-Chlor-2-Oxy-9,10-Anthrachinon. Sm. 258–260° (D.R.P. 148110 C. 1904 [1] 329).  
 2) p-Chlor-2-Oxy-9,10-Anthrachinon (D.R.P. 152175 C. 1904 [2] 168).
- $C_{14}H_7O_3Br$  1) 3-Brom-2-Oxy-9,10-Anthrachinon. Sm. 249–252° (D.R.P. 148110 C. 1904 [1] 329).
- $C_{14}H_7O_4N$  \*2) 2-Nitro-9,10-Phenanthrenchinon. Sm. 257–258° (B. 36, 3731 C. 1904 [1] 35; B. 37, 3085 C. 1904 [2] 1056).  
 \*7) p-Nitro-9,10-Phenanthrenchinon. Sm. 161–162° (B. 36, 3734 C. 1904 [1] 36).  
 \*8) 3-Nitro-9,10-Phenanthrenchinon. Sm. 276° (B. 37, 3084 C. 1904 [2] 1056).  
 9) 2-Nitro-9,10-Anthrachinon. Sm. 184–185° (B. 37, 63 C. 1904 [1] 520).

- $C_{14}H_7O_4N$  10) 4-Nitro-9,10-Phenanthrenchinon. Sm. 170—180° (*B.* 36, 3734 *C.* 1904 [1] 36).  
 $C_{14}H_7O_4N_3$  C 59,8 — H 2,5 — O 22,8 — N 14,9 — M. G. 281.  
 1) 3,4-Methylenäther d. 3,5-Dicyan-6-Oxy-2-Keto-4-[3,4-Dioxyphenyl]-2,5-Dihydropyridin (Piperonyldicyanglutakonimid). Sm. oberh. 300°.  $NH_4$ , Ca + 5H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Co, Cu, Ag (*C.* 1903 [2] 714).  
 $C_{14}H_7O_4Cl$  3) 2-Chlor-1,2-Dioxy-9,10-Anthrachinon (D.R.P. 151018 *C.* 1904 [1] 1382).  
 4) isom. 2-Chlor-1,2-Dioxy-9,10-Anthrachinon. Sm. 265—267° (D.R.P. 77179). — \*III, 302.  
 5) 2-Chlor-1,7-Dioxy-9,10-Anthrachinon (D.R.P. 153194 *C.* 1904 [2] 575).  
 6) 2-Chlor-2,6-Dioxy-9,10-Anthrachinon (D.R.P. 152175 *C.* 1904 [2] 168).  
 $C_{14}H_7O_4Br$  4) 2-Brom-1,4-Dioxy-9,10-Anthrachinon (D.R.P. 151018 *C.* 1904 [1] 1382).  
 5) isom. 2-Brom-1,2-Dioxy-9,10-Anthrachinon. Sm. 245° (D.R.P. 81965). — \*III, 302.  
 $C_{14}H_7O_5N_3$  2) 2,7-Dinitro-9-Imido-10-Ketophenanthren. Sm. 358—360° u. Zers. (*B.* 36, 3741 *C.* 1904 [1] 37).  
 $C_{14}H_7O_5Cl$  2) 2-Chlor-1,2,4-Trioxy-9,10-Anthrachinon (D.R.P. 151018 *C.* 1904 [1] 1382).  
 $C_{14}H_7O_5Br$  3) 2-Brom-1,2,4-Trioxy-9,10-Anthrachinon (D.R.P. 151018 *C.* 1904 [1] 1382).  
 $C_{14}H_7O_6N$  3) 4-Nitro-1,3-Dioxy-9,10-Anthrachinon (D.R.P. 153770 *C.* 1904 [2] 752).  
 4) 5-Nitro-1,4-Dioxy-9,10-Anthrachinon. Sm. 244—245° (D.R.P. 90041 — \*III, 305).  
 5) 1-Nitro-2,3-Dioxy-9,10-Anthrachinon (*B.* 36, 2939 *C.* 1903 [2] 886).  
 $C_{14}H_7O_6N_3$  \*4) 3-Nitrophenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 218 bis 219° (*C.* 1903 [2] 431).  
 \*6) 4-Nitrophenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 248 bis 249° u. Zers. (*C.* 1903 [2] 431).  
 8) Monooxim d. 2,7-Dinitro-9,10-Phenanthrenchinon. Sm. 246 bis 248° u. Zers. (*B.* 36, 3740 *C.* 1904 [1] 37).  
 9) Monooxim d. 4,5-Dinitro-9,10-Phenanthrenchinon. Sm. 190 bis 191° u. Zers. (*B.* 36, 3748 *C.* 1904 [1] 38).  
 $C_{14}H_7O_6Br$  1) 4-Brom-1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon (D.R.P. 114263 *C.* 1900 [2] 931). — \*III, 315.  
 $C_{14}H_8O_2N_2$  3) Amid einer Säure (aus 2-Nitrobenzylalkohol). Sm. 294° (*C.* r. 136, 372 *C.* 1903 [1] 636).  
 $C_{14}H_8O_2Cl_4$  \*2)  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 237—238° (*A.* 325, 46 *C.* 1903 [1] 462).  
 $C_{14}H_8O_2Cl_6$  \*1)  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 240° u. Zers. + 2 Molec. Essigsäure (*A.* 325, 51 *C.* 1903 [1] 460).  
 $C_{14}H_8O_2Br_2$  4) 2-Dibromacetyl- $\beta$ -Naphtofuran. Sm. 177° (*B.* 36, 2867 *C.* 1903 [2] 832).  
 5) 9,10-Phenanthrenchinondibromid (*B.* 37, 3556 *C.* 1904 [2] 1400).  
 $C_{14}H_8O_2Br_4$  2)  $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthen. Sm. 269° (*A.* 325, 30 *C.* 1903 [1] 460).  
 $C_{14}H_8O_2Br_6$  1)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthen. Zers. bei 265° (*A.* 325, 32 *C.* 1903 [1] 460).  
 $C_{14}H_8O_3N_2$  C 66,7 — H 3,2 — O 19,0 — N 11,1 — M. G. 252.  
 1) 1-Diazo-9,10-Anthrachinon. Sulfat (*B.* 37, 4185 *C.* 1904 [2] 1742).  
 2) 2-Diazo-9,10-Anthrachinon. Nitrat (*B.* 37, 64 *C.* 1904 [1] 520).  
 $C_{14}H_8O_3Cl_2$  2) Dichlordisalicylaldehyd. Sm. 172° (*Am.* 14, 295; *B.* 37, 4023).  
 $C_{14}H_8O_3Br_6$  1)  $\alpha$ -Methyläther d. 2,3,5,2',3',5'-Hexabrom- $\alpha$ ,4,4'-Trioxydiphenylmethan. Sm. 179° u. Zers. (*A.* 330, 77 *C.* 1904 [1] 1148).  
 $C_{14}H_8O_4N_2$  \*2) 9,10-Dinitroanthracen. Sm. 294° (*A.* 330, 162, 167 *C.* 1904 [1] 890).  
 \*8) 4-Nitrophenylimid d. Benzol-1,2-Dicarbonsäure (D.R.P. 141893 *C.* 1903 [1] 1325).  
 \*13) Phenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 135° (138°) (*C.* 1903 [2] 431; *B.* 37, 2610 *C.* 1904 [2] 522).

- $C_{14}H_8O_4N_2$  17) 5-Nitro-1-Amido-9,10-Anthrachinon. Sm. 200° (D.R.P. 78772; D.R.P. 147851 C. 1904 [1] 132). — \*III, 298.  
 18) 8-Nitro-1-Amido-9,10-Anthrachinon (D.R.P. 147851 C. 1904 [1] 132).  
 19) 3-Nitro-2-Amido-9,10-Anthrachinon. Sm. 305—306° (D.R.P. 148109 C. 1904 [1] 230).  
 20) Monooxim d. 2-Nitro-9,10-Phenanthrenchinon. Sm. 213° u. Zers. (B. 36, 3732 C. 1904 [1] 35).  
 21) Monooxim d. 4-Nitro-9,10-Phenanthrenchinon. Sm. 169—170° (B. 36, 3736 C. 1904 [1] 36).  
 $C_{14}H_8O_4N_4$  22) Nitroisopyrophtalon. Sm. 199° (B. 36, 1661 C. 1903 [2] 40).  
 2)  $\alpha\beta$ -Di[2,4-Dinitrophenyl]äthen. Sm. 266—267° (B. 37, 3599 C. 1904 [2] 1500).  
 3) 1,5-Bisdiazo-9,10-Anthrachinon. Sulfat (B. 37, 4186 C. 1904 [2] 1742).  
 $C_{14}H_8O_4Cl_2$  2) 3,3'-Dichlorbiphenyl-4,4'-Dicarbonsäure. Sm. 287—288° (Soc. 85, 9 C. 1904 [1] 376, 729).  
 $C_{14}H_8O_4Br_2$  11) 4,4'-Dibrombiphenyl-2,2'-Dicarbonsäure. Sm. 277—278° (B. 37, 3569 C. 1904 [2] 1402).  
 $C_{14}H_8O_4Br_4$  1) Diacetat d. 1,4,6,7-Tetrabrom-2,3-Dioxynaphtalin. Sm. 237° (A. 334, 363 C. 1904 [2] 1055).  
 $C_{14}H_8O_5Br_4$  1) Anhydrid d.  $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha\delta$ -Di[2-Furanyl]butan- $\beta\gamma$ -Dicarbonsäure. Sm. 196° (Soc. 85, 190 C. 1904 [1] 645, 925).  
 $C_{14}H_8O_5S$  3) 9,10-Anthrachinon-1-Sulfonsäure. K (B. 36, 4197 C. 1904 [1] 290; B. 37, 67 C. 1904 [1] 667; B. 37, 331 C. 1904 [1] 667; B. 37, 646 C. 1904 [1] 893; D.R.P. 149801 C. 1904 [1] 1043).  
 $C_{14}H_8O_6S$  6) 1-Oxy-9,10-Anthrachinon-6-Sulfonsäure. Na (D.R.P. 145188 C. 1903 [2] 1037).  
 $C_{14}H_8O_7S$  8) isom. 1,2-Dioxy-9,10-Anthrachinon- $\rho$ -Sulfonsäure (B. 36, 4199 C. 1904 [1] 291).  
 9) 1,4-Dioxy-9,10-Anthrachinon-2-Sulfonsäure (D.R.P. 153129 C. 1904 [2] 751).  
 10) isom. 1,4-Dioxy-9,10-Anthrachinon- $\rho$ -Sulfonsäure (D.R.P. 84505). — \*III, 305.  
 $C_{14}H_8O_8N_2$  \*2) 4,4'-Dinitrobiphenyl-2,2'-Dicarbonsäure +  $H_2O$ . Sm. 253° (B. 36, 3740 C. 1904 [1] 37).  
 \*3) 6,6'-Dinitrobiphenyl-2,2'-Dicarbonsäure. Sm. 303° u. Zers. (B. 36, 3746 C. 1904 [1] 37).  
 $C_{14}H_8O_8S$  4) 1,2,4-Trioxy-9,10-Anthrachinon-3-Sulfonsäure (D.R.P. 153129 C. 1904 [2] 751).  
 5) 1,2,4-Trioxy-9,10-Anthrachinon-5-[oder 8]-Sulfonsäure (B. 37, 71 C. 1904 [1] 666).  
 6) 1,2,4-Trioxy-9,10-Anthrachinon-8-Sulfonsäure (D.R.P. 155045 C. 1904 [2] 1270).  
 7) 1,2,4-Trioxy-9,10-Anthrachinon- $\rho$ -Sulfonsäure (D.R.P. 84774, 97688). — \*III, 312.  
 8) 1,4, $\rho$ -Trioxy-9,10-Anthrachinon-2-Sulfonsäure (D.R.P. 153129 C. 1904 [2] 751).  
 $C_{14}H_8O_8S_2$  \*1) 9,10-Anthrachinon-1,5-Disulfonsäure (B. 36, 4197 C. 1904 [1] 290; B. 37, 68 C. 1904 [1] 666).  
 \*2) 9,10-Anthrachinon-1,6-Disulfonsäure (B. 36, 4197 C. 1904 [1] 290; B. 37, 69 C. 1904 [1] 666).  
 9) 9,10-Anthrachinon-1,7-Disulfonsäure (B. 36, 4197 C. 1904 [1] 290; B. 37, 69 C. 1904 [1] 666).  
 10) 9,10-Anthrachinon-1,8-Disulfonsäure (B. 36, 4197 C. 1904 [1] 290; B. 37, 68 C. 1904 [1] 666).  
 $C_{14}H_8O_{10}S_2$  2) 1,2-Dioxy-9,10-Anthrachinon- $\rho$ -Disulfonsäure (D.R.P. 56952). — \*III, 304.  
 3) 1,5-Dioxy-9,10-Anthrachinon- $\rho$ -Disulfonsäure (D.R.P. 96364 C. 1898 [1] 1255). — \*III, 306.  
 4) 1,6-Dioxy-9,10-Anthrachinon- $\rho$ -Disulfonsäure.  $K_2$  (B. 36, 2941 C. 1903 [2] 886).  
 5) 2,7-Dioxy-9,10-Anthrachinon- $\rho$ -Disulfonsäure.  $K_2$  (D.R.P. 99612 C. 1899 [1] 399). — \*III, 309.

- $C_{14}H_9O_{12}S_2$  2) 1,3,5,7-Tetraoxy-9,10-Anthrachinon-*p*-Disulfonsäure.  $Na_2$  (D.R.P. 70803). — \*III, 313.
- $C_{14}H_9O_{14}S_2$  1) 1,2,4,5,6,8-Hexaoxy-9,10-Anthrachinon-3,7-Disulfonsäure (D.R.P. 75490, 94397, 104244, 104367, 104750, 107238 C. 1903 [2] 1130). — \*III, 315.
- $C_{14}H_9N_2S_2$  3) Biphenyl-2,4'-Disenföl (2,4'-Diisorhodanbiphenyl). Sm.  $94^\circ$  (B. 36, 4092 C. 1904 [1] 269).
- $C_{14}H_9N_3Cl$  2)  $\alpha$ -Chlorindophenazin. Sm. oberh.  $300^\circ$  (B. 35, 4331 C. 1903 [1] 292).  
3)  $\beta$ -Chlorindophenazin. Sm.  $310^\circ$  (B. 35, 4332 C. 1903 [1] 292).
- $C_{14}H_9N_3Br$  1) Bromindophenazin. Sm.  $279-280^\circ$  (B. 35, 4333 C. 1903 [1] 292).
- $C_{14}H_9OCl$  1) 1-Chlor-2-Phenylbenzofuran. Sd.  $191^\circ_{18}$  (B. 36, 3983 C. 1904 [1] 171).
- $C_{14}H_9OBr$  2) 4-Brom-1-Phenylbenzofuran. Sm.  $148^\circ$  (B. 36, 3982 C. 1904 [1] 171).  
3) 1-Brom-2-Phenylbenzofuran. Sd.  $189-191^\circ_{20}$  (B. 36, 4007 C. 1904 [1] 175).
- $C_{14}H_9O_2N$  \*5) 9-Nitroanthracen. Sm.  $143-144^\circ$  (A. 330, 165 C. 1904 [1] 890).  
\*8) 1-Amido-9,10-Anthrachinon (B. 35, 3922 C. 1903 [1] 88; D.R.P. 148110 C. 1904 [1] 329; D.R.P. 149801 C. 1904 [1] 1043).  
\*9) 2-Amido-9,10-Anthrachinon (D.R.P. 148110 C. 1904 [1] 329).  
\*10) 2-Amido-9,10-Phenanthrenchinon (C. 1904 [1] 461).  
\*11) 2-Benzoylanthranil (B. 36, 2766 C. 1903 [2] 835).  
\*12) Pyrophtalon. Sm.  $260^\circ$  u. Zers. ( $283^\circ$ ) (B. 36, 1654 C. 1903 [2] 39; B. 36, 3916 C. 1904 [1] 97; B. 37, 3025 C. 1904 [2] 1411).  
\*18) Phenylimid d. Benzol-1,2-Dicarbonsäure. Sm.  $203^\circ$  (C. 1903 [2] 432; B. 36, 1000 C. 1903 [1] 1131).  
\*19) Phenylisoimid d. Benzol-1,2-Dicarbonsäure. Sm.  $120-122^\circ$  (B. 21, 339 C. 1903 [1] 156).  
\*23) 9-Nitrophenanthren. Sm.  $116-117^\circ$ . Pikrat (B. 36, 2511 C. 1903 [2] 505).  
27) 3-Keto-2-Phenylindol-1-Oxyd (C. 1904 [1] 1356).  
28) 1,3-Diketo-2-Phenyl-2,3-Dihydro-5-Isobenzazol +  $H_2O$ . HCl +  $H_2O$ , Ba +  $2H_2O$ , Ag (B. 37, 2142 C. 1904 [2] 234).  
29) Lakton d. 4-[ $\alpha$ -Oxy- $\beta$ -Phenyläthenyl]pyridin-3-Carbonsäure (Benzalmerid). Sm.  $178-180^\circ$  (B. 37, 2140 C. 1904 [2] 234).  
30) Isopyrophtalon. Sm.  $280^\circ$  ( $283^\circ$ ) (B. 36, 1657 C. 1903 [2] 39; B. 36, 3916 C. 1904 [1] 97; B. 37, 3024 C. 1904 [2] 1411).
- $C_{14}H_9O_2N_3$  \*4) Nitril d. 2,6-Diketo-4-[3-Methylphenyl]-1,2,3,6-Tetrahydropyridin-3,5-Dicarbonsäure.  $NH_4$ , Cu +  $6H_2O$ , Ag (A. 325, 209 C. 1903 [2] 439).  
5) 3,4-Methylenäther d. 3-[3,4-Dioxyphenyl]-1,2,4-Benztriazin. Sm.  $154^\circ$  (C. 1903 [2] 427).
- $C_{14}H_9O_2Cl_3$  1) Benzoat d. 2,3,5-Trichlor-4-Oxy-1-Methylbenzol. Sm.  $89^\circ$  (A. 328, 281 C. 1903 [2] 1245).
- $C_{14}H_9O_2Br$  3) 2-Bromacetyl- $\beta$ -Naphtofuran. Sm.  $113^\circ$  (B. 36, 2867 C. 1903 [2] 832).
- $C_{14}H_9O_3Br_3$  1) Benzoat d. 3,5-Dibrom-2-Oxy-1-Brommethylbenzol. Sm.  $119$  bis  $120^\circ$  (A. 332, 199 C. 1904 [2] 211).
- $C_{14}H_9O_3N$  \*2) Nitroanthron. Sm.  $135^\circ$  ( $148^\circ$  u. Zers.) (A. 330, 171 C. 1904 [1] 891; A. 330, 177 C. 1904 [1] 891).  
\*7) 4-Amido-1-Oxy-9,10-Anthrachinon. Sm.  $207-208^\circ$  (B. 35, 3923 C. 1903 [1] 88; D.R.P. 154353 C. 1904 [2] 1013).  
\*13) 4-Oxyphenylimid d. Benzol-1,2-Dicarbonsäure. Sm.  $287-288^\circ$  (B. 36, 1000 C. 1903 [1] 1131).  
17) 5-Amido-1-Oxy-9,10-Anthrachinon. Sm.  $215-216^\circ$  ( $210^\circ$ ). Na (B. 35, 3925 C. 1903 [1] 88; D.R.P. 148875 C. 1904 [1] 556; D.R.P. 149780 C. 1904 [1] 909).  
18) 6-Amido-1-Oxy-9,10-Anthrachinon (B. 36, 2936 C. 1903 [2] 885).  
19) 8-Amido-1-Oxy-9,10-Anthrachinon. Sm.  $214-215^\circ$  ( $230^\circ$ ) (B. 35, 3927 C. 1903 [1] 89; D.R.P. 148875 C. 1904 [1] 556; D.R.P. 149780 C. 1904 [1] 909).  
20) 10-Hydroxyloximido-9-Keto-9,10-Dihydroanthracen (Isonitrosoanthron). Na (A. 330, 178 C. 1904 [1] 891).  
21) Acetat d. 7-Oximido-8-Ketoacenaphten. Sm.  $247^\circ$  (G. 33 [1] 43 C. 1903 [1] 881).

- $C_{14}H_9O_3N$  22) Acetat d. 2-Naphtisatin. Sm. 195° (*B.* 36, 1738 *C.* 1903 [2] 119).  
 $C_{14}H_9O_3N_3$  8) 4-Nitro-2-Acetyllindazol. Sm. 162–163° (*B.* 37, 2584 *C.* 1904 659).  
 9) 6-Nitro-2-Benzoyllindazol. Sm. 165–165,5° (*B.* 37, 2578 *C.* 1904 [2] 658).  
 10) Nitril d. 3-[3-Nitrobenzoyl]amidobenzol-1-Carbonsäure. Sm. 196,5 bis 197° (*C.* 1904 [2] 102).  
 11) Nitril d. 3-[4-Nitrobenzoyl]amidobenzol-1-Carbonsäure. Sm. 250 bis 251° (*C.* 1904 [2] 102).  
 $C_{14}H_9O_3Cl$  3) 2-[4-Chlorbenzoyl]benzol-1-Carbonsäure. Sm. 147–148° (151–153°) (*D.R.P.* 75 288; *D.R.P.* 148 110 *C.* 1904 [1] 329). — \*II, 1000.  
 $C_{14}H_9O_3Br$  4) 2-[4-Brombenzoyl]benzol-1-Carbonsäure. Sm. 169° (*D.R.P.* 148 110 *C.* 1904 [1] 329).  
 $C_{14}H_9O_4N$  \*5) Diäthylester d. 4-Methylphenylamidomalonsäure (*Am.* 30, 142 *C.* 1903 [2] 721).  
 14) 2-Nitro-9,10-Dioxyphenanthren. Sm. 220° (*B.* 36, 3732 *C.* 1904 [1] 35).  
 15) 4-Amido-1,8-Dioxy-9,10-Anthrachinon (*B.* 35, 3927 *C.* 1903 [1] 89).  
 $C_{14}H_9O_4N_3$  7) Nitril d. 6-Oxy-2-Keto-4-[4-Oxy-3-Methoxyphenyl]-2,5-Dihydro-pyridin-3,5-Dicarbonsäure.  $NH_4 + 2\frac{1}{2}H_2O$ , Ag (*C.* 1904 [2] 902).  
 $C_{14}H_9O_4Br$  3) 4-Brombiphenyl-2,2'-Dicarbonsäure. Sm. 238–239° (*B.* 37, 3566 *C.* 1904 [2] 1402).  
 4) 5-Brombiphenyl-2,2'-Dicarbonsäure. Sm. 257° u. Zers. (*B.* 37, 3572 *C.* 1904 [2] 1403).  
 $C_{14}H_9O_5N$  9) 2-[3-Nitrobenzoyl]benzol-1-Carbonsäure. Sm. 186–187° (*D.R.P.* 148 110 *C.* 1904 [1] 329).  
 10) Gem. Anhydrid d. Benzolcarbonsäure u. 4-Nitrobenzol-1-Carbonsäure. Sm. 130° (*B.* 36, 2537 *Ann.* *C.* 1903 [2] 720).  
 $C_{14}H_9O_5N$  \*2) 4-Nitrobiphenyl-2,2'-Dicarbonsäure. Sm. 214–216° (*B.* 36, 3732 *C.* 1904 [1] 35).  
 3) 5-Nitrobiphenyl-2,2'-Dicarbonsäure. Sm. 268° (*B.* 36, 3734 *C.* 1904 [1] 35).  
 4) 6-Nitrobiphenyl-2,2'-Dicarbonsäure. Sm. 248–250° u. Zers. (*B.* 36, 3737 *C.* 1904 [1] 36).  
 $C_{14}H_9O_5N_3$  9) 9,9,10-Trinitro-9,10-Dihydroanthracen. Sm. 139–140° u. Zers. (*A.* 330, 162 *C.* 1904 [1] 890).  
 10) 3,9-Dinitro-6-Acetylphenoxazin. Sm. 192° (*B.* 36, 477 *C.* 1903 [1] 651).  
 $C_{14}H_9O_5N_5$  \*1) 4,6-Dinitrodiphenylamin-2,2'-Dicarbonsäure. Sm. 251–252°. Na (*G.* 33 [2] 330 *C.* 1904 [1] 278).  
 2) 4,6-Dinitrodiphenylamin-2,3'-Dicarbonsäure. Sm. 273° (*G.* 33 [2] 332 *C.* 1904 [1] 278).  
 3) 4,6-Dinitrodiphenylamin-2,4'-Dicarbonsäure. Sm. 264–265° (*G.* 33 [2] 332 *C.* 1904 [1] 278).  
 $C_{14}H_9O_6N_5$  C 43,0 — H 2,3 — O 36,8 — N 17,9 — M. G. 391.  
 1) Acetyl-2, 4, 2', 4'-Tetranitrodiphenylamin. Sm. 178° (*C.* 1903 [2] 1109).  
 $C_{14}H_9O_{10}N_5$  C 41,3 — H 2,2 — O 39,3 — N 17,2 — M. G. 407.  
 1) Acetat d. 2', 4', 2, 4'-Tetranitro-4-Oxydiphenylamin. Sm. 161° (*B.* 37, 1731 *C.* 1904 [1] 1521).  
 $C_{14}H_9N_3Cl_2$  1) 2,5-Di[3-Chlorphenyl]-1,3,4-Triazol. Sm. 220° (*J. pr.* [2] 69, 384 *C.* 1904 [2] 536).  
 $C_{14}H_{10}ON_2$  \*5) 2,5-Diphenyl-1,3,4-Oxiazol. Sm. 138° (*J. pr.* [2] 69, 157 *C.* 1904 [1] 1274).  
 \*8) 1-Benzoylbenzimidazol (*B.* 37, 3116 *C.* 1904 [2] 1316).  
 \*9) 4-Oxy-2-Phenyl-1,3-Benzodiazin. Sm. 235° (*B.* 36, 2385 *C.* 1903 [2] 569).  
 \*11) 4-Keto-2-Phenyl-1,4-Dihydro-1,3-Benzodiazin. Sm. 233–234° (*J. pr.* [2] 67, 457 *C.* 1903 [1] 1421).  
 24) 4,4'-Azoxy- $\alpha\beta$ -Diphenyläthen (p-Azoxystilben) (*C.* 1903 [1] 1414).  
 25)  $\alpha$ -Pyrophthalin. Sm. 185°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, TiCl<sub>4</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 36, 1663 *C.* 1903 [2] 40).  
 26)  $\beta$ -Pyrophthalin. Sm. 255°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, TiCl<sub>4</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> (*B.* 36, 1664 *C.* 1903 [2] 41).

- $C_{14}H_{10}ON_2$  27) 3-Keto-1-Benzyliden-2,3-Dihydro-2,5-Isobenzazol (Benzalmerimidin). Sm. 234—236° (*B.* 37, 2145 *C.* 1904 [2] 235).
- 28) Aldehyd d. 2-Phenylindazol-2'-Carbonsäure. Sm. 94,5—95° (*C. r.* 137, 983 *C.* 1904 [1] 176; *Bl.* [3] 31, 872 *C.* 1904 [2] 661).
- 29) Nitril d. 3-Benzoylamidobenzol-1-Carbonsäure. Sm. 141,5—142° (*C.* 1904 [2] 101).
- $C_{14}H_{10}ON_4$  C 67,2 — H 4,0 — O 6,4 — N 22,4 — M. G. 250.
- 1) Aldazin d. Azoxybenzol-3,3'-Dicarbonsäurealdehyd (*B.* 36, 3472 *C.* 1903 [2] 1269).
- $C_{14}H_{10}OCl_2$  \*5) Aldehyd d. Di[4-Chlorphenyl]essigsäure (*C.* 1903 [2] 1052).
- $C_{14}H_{10}OJ_2$  1) 10-Oxy-9-Phenylantracendijodid (*B.* 37, 3343 *C.* 1904 [2] 1057).
- $C_{14}H_{10}O_2N_2$  \*3) 1,5-Diamido-9,10-Anthrachinon (D.R.P. 147851 *C.* 1904 [1] 132; *C.* 1904 [1] 461; *B.* 37, 4180 *C.* 1904 [2] 1741).
- \*6) 2,7-Diamido-9,10-Phenanthrenchinon. Sm. oberh. 315° (*C.* 1904 [1] 462).
- \*33) Azodibenzoyl. Sm. 118° u. Zers. (*J. pr.* [2] 70, 272 *C.* 1904 [2] 1543; *J. pr.* [2] 70, 289 *C.* 1904 [2] 1566).
- \*40) Aldehyd d. Azobenzol-4,4'-Dicarbonsäure. Sm. 237—238° (*B.* 36, 2306 *C.* 1903 [2] 428; *Bl.* [3] 31, 453 *C.* 1904 [1] 1498).
- 41) 2,7-Diamido-9,10-Anthrachinon (D.R.P. 148109 *C.* 1904 [1] 230).
- 42) 4,5-Diamido-9,10-Phenanthrenchinon. Sm. 235° (*B.* 36, 3750 *C.* 1904 [1] 38).
- 43) 3-Nitroso-1-Oxy-2-Phenylindol. Sm. 240° (*C.* 1904 [1] 1356).
- 44) Oxim d. Isopyrophtalon. Sm. 240° (*B.* 36, 1662 *C.* 1903 [2] 40).
- 45) 2-Phenylindazol-2'-Carbonsäure? Sm. 203—204° (204—205°) (*C. r.* 136, 372 *C.* 1903 [1] 635; *C. r.* 137, 983 *C.* 1904 [1] 176; *C. r.* 138, 1277 *C.* 1904 [2] 121; *Bl.* [3] 31, 873 *C.* 1904 [2] 661).
- 46) Aldehyd d. Azobenzol-3,3'-Dicarbonsäure. Sm. 150° (*C. r.* 138, 289 *C.* 1904 [1] 722).
- 47) Phenylimid d. 3-Amidobenzol-1,2-Dicarbonsäure. Sm. 185—187° (*B.* 37, 2611 *C.* 1904 [2] 522).
- 48) 2-Amidophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 184—186° (*A.* 327, 49 *C.* 1903 [1] 1336).
- 49) 3-Amidophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 190° (178°) (*B.* 10, 1165; *A.* 327, 42 *C.* 1903 [1] 1336).
- 50) 4-Amidophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 250° (182°) (*B.* 10, 1164; *A.* 327, 43 *C.* 1903 [1] 1336).
- 51) 1,2-Phenylenamid d. Benzol-1,2-Dicarbonsäure. Sm. 278° (277°) u. Zers. (*G.* 24 [1] 145; *A.* 327, 41 *C.* 1903 [1] 1336). — IV, 563.
- 52) Verbindung (aus p-Hydroxylaminbenzaldehyd). Sm. 205—206° (*C.* 1903 [1] 147).
- $C_{14}H_{10}O_2N_4$  7) 6-[4-Nitrobenzyliden]amidoindazol. Sm. 215—216° (*B.* 37, 2580 *C.* 1904 [2] 659).
- 8) 7-[4-Nitrobenzyliden]amidoindazol. Sm. 227—229° (*B.* 37, 2577 *C.* 1904 [2] 659).
- $C_{14}H_{10}O_2Cl_2$  \*2) 2,6-Dichlor-4-Methylphenylester d. Benzolcarbonsäure. Sm. 91° (*A.* 328, 278 *C.* 1903 [2] 1245).
- $C_{14}H_{10}O_2Cl_4$  2)  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 160° (*A.* 325, 50 *C.* 1903 [1] 462).
- $C_{14}H_{10}O_2S_2$  \*1) Dibenzoyldisulfid. Sm. 129—130° (133°) (*B.* 36, 1010 *C.* 1903 [1] 1077; *B.* 36, 2272 *C.* 1903 [2] 563).
- $C_{14}H_{10}O_3N_2$  \*6) Aldehyd d. Azoxybenzol-4,4'-Dicarbonsäure. Sm. 190° (*C.* 1903 [1] 147; *Am.* 28, 475 *C.* 1903 [1] 327; *B.* 36, 3474 *C.* 1903 [2] 1270).
- 12) 1-Amido-5-Hydroxylamido-9,10-Anthrachinon (D. R. P. 147851 *C.* 1904 [1] 132).
- 13) *cis*- $\gamma$ -Keto- $\alpha$ -[2-Nitrophenyl]- $\gamma$ -[2-Pyridyl]propen. Sm. 153° (*B.* 35, 4064 *C.* 1903 [1] 91).
- 14) *trans*- $\gamma$ -Keto- $\alpha$ -[2-Nitrophenyl]- $\gamma$ -[2-Pyridyl]propen. Sm. 141° (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 35, 4065 *C.* 1903 [1] 91).
- 15) Aldehyd d. Azoxybenzol-3,3'-Dicarbonsäure. Sm. 129° (*Am.* 28, 479 *C.* 1903 [1] 328; *B.* 36, 3470 *C.* 1903 [2] 1269; *B.* 36, 3801 *C.* 1904 [1] 25).
- 16) Monoaldehyd d. Azobenzol-3,3'-Dicarbonsäure. Sm. 163°. Na (*B.* 36, 3473 *C.* 1903 [2] 1269).

- $C_{14}H_{10}O_3N_2$  17) Monoaldehyd d. Azobenzol-4,4'-Dicarbonsäure (B. 36, 3474 C. 1903 [2] 1270).
- $C_{14}H_{10}O_3S$  10) Anthracen-1-Sulfonsäure. Na (B. 37, 70 C. 1904 [1] 666; B. 37, 648 C. 1904 [1] 892).
- $C_{14}H_{10}O_4N_2$  \*4)  $\alpha\beta$ -Di[4-Nitrophenyl]äthen. Sm. 280° (G. 32 [2] 356 C. 1903 [1] 629).
- \*14) N-3-Formylphenyläther d. 3-Nitrobenzaloxim. Sm. 189—190° (B. 36, 2309 C. 1903 [2] 429).
- \*15) N-4-Formylphenyläther d. 4-Nitrobenzaloxim. Sm. 224° (B. 36, 2306 C. 1903 [2] 428).
- \*17) 9,10-Dinitro-9,10-Dihydroanthracen. Sm. 194° (A. 330, 170 C. 1904 [1] 891).
- 27) 4,5-Diamido-1,8-Dioxy-9,10-Anthrachinon (D.R.P. 100138 C. 1899 [1] 655). — \*III, 308.
- 28) Nitrit d. 10-Nitro-9-Oxy-9,10-Dihydroanthracen. Sm. 125° u. Zers. (A. 330, 159 C. 1904 [1] 890).
- 29) 2-[2-Nitrobenzyliden]amidobenzol-1-Carbonsäure. Sm. 167—168° (B. 37, 595 C. 1904 [1] 881).
- 30) 2-[3-Nitrobenzyliden]amidobenzol-1-Carbonsäure. Sm. 198—200° (B. 37, 595 C. 1904 [1] 881).
- $C_{14}H_{10}O_4N_6$  5) 6-Nitro-3-[5-Nitro-2-Methylphenylazo]indazol (B. 37, 2579 C. 1904 [2] 659).
- 6) 7-Nitro-3-[6-Nitro-2-Methylphenylazo]indazol. Sm. 250—251° (B. 37, 2576 C. 1904 [2] 658).
- $C_{14}H_{10}O_4Cl_2$  4) Diacetat d. 1,4-Dichlor-2,3-Dioxynaphtalin. Sm. 140,5° (A. 334, 354 C. 1904 [2] 1054).
- $C_{14}H_{10}O_4Br_2$  4) Diacetat d. 1,4-Dibrom-2,3-Dioxynaphtalin. Sm. 175° (A. 334, 362 C. 1904 [2] 1055).
- 5) Diacetat d. 6,7-Dibrom-2,3-Dioxynaphtalin. Sm. 155° (A. 334, 365 C. 1904 [2] 1055).
- $C_{14}H_{10}O_4Br_4$  2)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 280° u. Zers. (A. 325, 41 C. 1903 [1] 461).
- 3) isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan? Sm. 270° u. Zers. (A. 325, 43 C. 1903 [1] 461).
- $C_{14}H_{10}O_5N_2$  \*11) Azoxybenzol-2,2'-Dicarbonsäure. Sm. 250—251° (237—242°) (B. 36, 374 C. 1903 [1] 578; B. 36, 2049 C. 1903 [2] 383; C. 1904 [1] 878).
- \*12) Azoxybenzol-3,3'-Dicarbonsäure (B. 36, 3472 C. 1903 [2] 1269).
- 22) Nitrat d. 10-Nitro-9-Oxy-9,10-Dihydroanthracen. Sm. 78—79° u. Zers. (A. 330, 160 C. 1904 [1] 890).
- 23) 2-Nitrophenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 145 bis 146° (A. 327, 55 C. 1903 [1] 1336).
- 24) 3-Nitrophenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 240° (A. 327, 55 C. 1903 [1] 1336).
- 25) 4-Nitrophenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 190 bis 192° (A. 327, 55 C. 1903 [1] 1336).
- $C_{14}H_{10}O_6N_2$  6) p-Diamido-1,3,5,7-Tetraoxy-9,10-Anthrachinon (D.R.P. 81741, 81742, 106034, 119756). — \*III, 313.
- $C_{14}H_{10}O_7S$  1) 1,4,9,10-Tetraoxyanthracen-5-Sulfonsäure (D.R.P. 148767 C. 1904 [1] 558).
- 2) 1,4,9,10-Tetraoxyanthracen-6-Sulfonsäure (Chinizarinhydrärsulfonsäure) (D.R.P. 148767 C. 1904 [1] 558; C. 1904 [2] 340).
- $C_{14}H_{10}O_{10}N_4$  2) Dimethyläther d. p-Tetranitro-4,4'-Dioxybiphenyl. Sm. 244,6° (Am. 31, 138 C. 1904 [1] 809).
- $C_{14}H_{10}N_2S$  \*1) 3,5-Diphenyl-1,2,4-Thiodiazol. Sm. 91°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 69, 45 C. 1904 [1] 521).
- \*3) 2,5-Diphenyl-1,3,4-Thiodiazol. Sm. 141—142°; Sd. 259°<sub>17</sub> (J. pr. [2] 69, 158 C. 1904 [1] 1274).
- $C_{14}H_{10}N_2S_2$  \*1) 2-Thiocarbonyl-4,5-Diphenyl-2,4-Dihydro-1,3,4-Thiodiazol (Endothiodiphenylthiobiazolin) (J. pr. [2] 67, 216 C. 1903 [1] 1260).
- 3) Phenylamid d. Benzthiazol-1-Thiocarbonsäure. Sm. 155° (B. 37, 3727 C. 1904 [2] 1450).
- $C_{14}H_{10}N_2Se$  \*1) 3,5-Diphenyl-1,2,4-Selendiazol. Sm. 85°. (2HCl, PtCl<sub>4</sub>) (B. 37, 2551 C. 1904 [2] 520).
- 2) 2,5-Diphenyl-1,3,4-Selendiazol. Sm. 156° (J. pr. [2] 69, 511 C. 1904 [2] 601).

- $C_{14}H_{10}N_3Cl$  2) 5-Chlor-1,4-Diphenyl-1,2,3-Triazol. Sm. 137° (A. 335, 106 C. 1904 [2] 1232).
- $C_{14}H_{11}ON$  \*17) 5-Keto-10-Methyl-5,10-Dihydroakridin (B. 37, 1567 C. 1904 [1] 1447).
- \*24) 9-Amido-10-Oxyphenanthren (D.R.P. 141422 C. 1903 [1] 1197).
- 26)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\gamma$ -[2-Pyridyl]propan. Sm. 75°. HCl, (2HCl,  $PtCl_4$ ) (B. 35, 4061 C. 1903 [1] 91).
- 27) 1-Keto-2-[2-Pyridyl]-2,3-Dihydroinden. Sm. 207,5° (B. 36, 3917 C. 1904 [1] 97).
- $C_{14}H_{11}ON_3$  \*5) 2-Keto-1,3-Diphenyl-2,3-Dihydro-1,3,4-Triazol (1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Oxyd). Sm. 256° (J. pr. [2] 67, 263 C. 1903 [1] 1266).
- 22)  $\alpha$ -Phenyl- $\beta$ -[3-Cyanphenyl]harnstoff. Sm. 170,5—171° (C. 1904 [2] 102).
- 23) 5-Oxy-1,4-Diphenyl-1,2,3-Triazol. Sm. 150—151°. Na (A. 335, 102 C. 1904 [2] 1232).
- 24) 2-[2-Oximidomethylphenyl]indazol. Sm. 223° (B. [3] 31, 872 C. 1904 [2] 661).
- 25) 2-Amido-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 237 bis 238° (C. 1903 [2] 831).
- 26) 2-Phenylamido-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 256° (C. 1903 [2] 831).
- 27) 3-Phenylamido-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 140° (J. pr. [2] 69, 101 C. 1904 [1] 730).
- $C_{14}H_{11}ON_5$  C 63,4 — H 4,1 — O 6,0 — N 26,4 — M. G. 265.
- 1) Verbindung (aus 5-Oxy-1-Phenyl-1,2,3-Triazol). Sm. 131—132° (A. 335, 87 C. 1904 [2] 1231).
- 2) isom. Verbindung (aus 5-Oxy-1-Phenyl-1,2,3-Triazol). Sm. 162—163° (A. 335, 88 C. 1904 [2] 1231).
- $C_{14}H_{11}OCl$  \*3)  $\alpha$ -Keto- $\beta$ -[4-Chlorphenyl]- $\alpha$ -Phenyläthan. Sm. 133° (J. pr. [2] 67, 379 C. 1903 [1] 1356).
- $C_{14}H_{11}O_2N$  \*19) Imid d. Benzolcarbonsäure. Sm. 149° (Soc. 81, 1530 C. 1903 [1] 157).
- \*22) 2-Naphtylimid d. Bernsteinsäure. Sm. 183° (B. 37, 1599 C. 1904 [1] 1418).
- 33) 3-Oxy-5-Methyl-1-Phenylbenzoxazol. Sm. 124—126° (B. 37, 3110 C. 1904 [2] 994).
- 34) 2-[ $\alpha$ -Oximidoäthyl]- $\beta$ -Naphtofuran. Sm. 207° (B. 36, 2867 C. 1903 [2] 832).
- 35) 6-Acetylphenoxazin. Sm. 142° (B. 36, 477 C. 1903 [1] 650).
- $C_{14}H_{11}O_2N_3$  \*9) 1-[4-Methylphenyl]-1,2,3-Benztriazol-5-Carbonsäure. Sm. 267° (A. 332, 88 C. 1904 [1] 1569).
- \*19) 5-Keto-3-Oxy-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 163° (B. 36, 1367 C. 1903 [1] 1342).
- 23) 6-Nitro-2-Benzylindazol. Sm. 111—112° (B. 37, 2578 C. 1904 [2] 658).
- 24) 5-Nitro-2-Methyl-1-Phenylbenzimidazol. Sm. 170° (J. pr. [2] 69, 41 C. 1904 [1] 521).
- 25) p-Phenylazo-5-Oxy-1-Methylbenzoxazol. Sm. 91° (B. 35, 4206 C. 1903 [1] 147).
- 26) 1-[2-Methylphenyl]-1,2,3-Benztriazol-5-Carbonsäure. Sm. 204,5° (A. 332, 86 C. 1904 [1] 1569).
- 27) 2-Acetylamido-3-Oxy-5,10-Naphtdiazin. Sm. noch nicht bei 340° (B. 35, 4305 C. 1903 [1] 344).
- $C_{14}H_{11}O_2Cl$  6) Diphenylchloroessigsäure. Sm. 118—119° u. Zers. (B. 36, 145 C. 1903 [1] 466).
- $C_{14}H_{11}O_2Br$  9) Benzoat d. 6-Brom-2-Oxy-1-Methylbenzol. Sm. 76° (B. 37, 1022 C. 1904 [1] 1203).
- $C_{14}H_{11}O_3N$  \*20) 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 183° (J. pr. [2] 69, 25 C. 1904 [1] 641).
- \*32) Phenylmonamid d. Benzol-1,2-Dicarbonsäure (B. 36, 997 C. 1903 [1] 1131).
- 43) 3-[2-Oxybenzyliden]amidobenzol-1-Carbonsäure. Sm. 202—204° (B. 37, 595 C. 1904 [1] 881).

- $C_{14}H_{11}O_8N$  44) 2-[3-Amidobenzoyl]benzol-1-Carbonsäure. Sm. 165° u. Zers. (D.R.P. 148110 *C.* 1904 [1] 329).
- 45) 4-Phenylacetylpyridin-3-Carbonsäure. Sm. 187—188° u. Zers. *Ag* (*B.* 37, 2143 *C.* 1904 [2] 234).
- 46) Aethylester d. 1-Ketoinden-3-Cyanessigsäure. Sm. 124° (*B.* 33, 2431). — \*II, 1141.
- 47) Benzoylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 122° (*Soc.* 81, 1533 *C.* 1903 [1] 157).
- 48) Verbindung (aus  $\alpha$ -Pikolin u. Phtalsäureanhydrid). Sm. 180° (*B.* 36, 1659 *C.* 1903 [2] 40).
- $C_{14}H_{11}O_8N_3$  14) 3-Oximidomethylazobenzol-3'-Carbonsäure. Sm. 185° (*B.* 36, 3473 *C.* 1903 [2] 1270).
- 15) Amid d. 4-Benzoxylphenylazoameisensäure. Sm. 191° u. Zers. (*A.* 334, 188 *C.* 1904 [2] 835).
- $C_{14}H_{11}O_4N$  \*8) 4-Amidobiphenyl-2,2'-Dicarbonsäure. Sm. 277° u. Zers. (*B.* 36, 3733 *C.* 1904 [1] 35).
- \*12) 4-Nitro-2-Methylphenylester d. Benzolcarbonsäure. Sm. 128° (*A.* 330, 95 *C.* 1904 [1] 1075).
- \*13) 4-Oxyphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 220 bis 225° (*B.* 36, 998 *C.* 1903 [1] 1131).
- \*17) 4'-Nitro-6-Oxy-3-Methyldiphenylketon. Sm. 142—143° (*B.* 36, 3892 *C.* 1904 [1] 93).
- \*19) Methyläther d. 4'-Nitro-4-Oxydiphenylketon. Sm. 121° (*B.* 36, 3899 *C.* 1904 [1] 94).
- 25) Methyläther d. 4'-Nitro-2-Oxydiphenylketon. Sm. 117—119° (*B.* 36, 3900 *C.* 1904 [1] 94).
- 26) Diphenylamin-2,2'-Dicarbonsäure. Sm. 300° u. Zers. (D.R.P. 145604, 145605 *C.* 1903 [2] 1099; D.R.P. 148179 *C.* 1904 [1] 412).
- 27) Diphenylamin d. 2,3'-Dicarbonsäure. Sm. 281—282° (D.R.P. 148179 *C.* 1904 [1] 412).
- 28) Diphenylamin-2,4'-Dicarbonsäure. Sm. 282—283° (D.R.P. 148179 *C.* 1904 [1] 412).
- 29) 6-Amidobiphenyl-2,2'-Dicarbonsäure. Sm. noch nicht bei 300° (*B.* 36, 3738 *C.* 1904 [1] 36).
- 30) 2-Methyl-4-Phenylpyridin-5,6-Dicarbonsäure. Sm. 100° u. Zers. *Cu* (*B.* 36, 2457 *C.* 1903 [2] 671).
- 31) Aethylester d.  $\beta$ -Benzoylamidofuran-2-Carbonsäure. Sm. 99—100° (*C. r.* 136, 1455 *C.* 1903 [2] 292).
- 32) 4-Nitro-3-Methylphenylester d. Benzolcarbonsäure. Sm. 75° (*A.* 330, 99 *C.* 1904 [1] 1076).
- 33) 6-Nitro-3-Methylphenylester d. Benzolcarbonsäure. Sm. 76° (*A.* 330, 99 *C.* 1904 [1] 1076).
- $C_{14}H_{11}O_4N_3$  31) *s*-Phenyl-3-Nitrobenzoylharnstoff. Sm. 224° (*C.* 1904 [1] 1559).
- 32) Phenylamid d. 3-Nitrophenyloxaminsäure. Sm. 204° (*Soc.* 81, 1569 *C.* 1903 [1] 157).
- $C_{14}H_{11}O_5N_3$  19) 3,5-Dinitro-4-Acetylamidobiphenyl. Sm. 240—241° (*B.* 37, 883 *C.* 1904 [1] 1143).
- $C_{14}H_{11}O_8N_3$  \*4) Acetat d. 4-[2,4-Dinitrophenyl]amido-1-Oxybenzol. Sm. 137° (*B.* 36, 3265 *C.* 1903 [2] 1126).
- 6) 2,4-Dinitro-4'-Acetylamidodiphenyläther. Sm. 195° (*B.* 37, 1518 *C.* 1904 [1] 1596).
- 7) 4',6'-Dinitro-2-Methyldiphenylamin-2'-Carbonsäure. Sm. 171—172°.  $Na, K + H_2O$  (*G.* 33 [2] 325 *C.* 1904 [1] 278).
- 8) 4',6'-Dinitro-3-Methyldiphenylamin-2'-Carbonsäure. Sm. 203° (*G.* 33 [2] 327 *C.* 1904 [1] 278).
- 9) 4',6'-Dinitro-4-Methyldiphenylamin-2'-Carbonsäure. Sm. 220°.  $Na, K + H_2O$  (*G.* 33 [2] 327 *C.* 1904 [1] 278).
- $C_{14}H_{11}NCl_2$  1) 5,10-Dichlor-5-Methyl-5,10-Dihydroakridin. Sm. 280° u. Zers. (*Soc.* 85, 1201 *C.* 1904 [2] 1059).
- $C_{14}H_{11}NBr_2$  2) 5,10-Dibrom-5-Methyl-5,10-Dihydroakridin. Zers. 261° (*Soc.* 85, 1201 *C.* 1904 [2] 1060).
- $C_{14}H_{11}NJ_2$  1) 5-Methylakridindijodid. Sm. 180—210° (*Soc.* 85, 1202 *C.* 1904 [2] 1060).

- $C_{14}H_{11}NSe$  1) Methyläther d. 5-Selenoakridin. Sm. 108° (2HCl,  $PtCl_4$ ), Pikrat (*J. pr.* [2] 68, 93 *C.* 1903 [2] 446).
- $C_{14}H_{11}N_3S$  8)  $\alpha$ -Phenyl- $\beta$ -[3-Cyanphenyl]thioharnstoff (*C.* 1904 [2] 102).  
9) 1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Disulfid. Sm. 214 bis 215° (*J. pr.* [2] 67, 249 *C.* 1903 [1] 1264).
- $C_{14}H_{11}ClBr_2$  2)  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[2-Chlorphenyl]äthan. Sm. 176° (*B.* 35, 3971 *C.* 1903 [1] 31).
- $C_{14}H_{12}ON_2$  \*24) 3-Acetylamidocarbazol. Sm. 217° (*A.* 337, 101 *C.* 1904 [1] 1570).  
\*29) Verbindung (aus 2-Amidobenzol-1-Carbonsäurealdehyd). Sd. 250°<sub>17</sub> (*C. r.* 136, 371 *C.* 1903 [1] 635).  
40) 2-[2-Oxymethylphenyl]indazol. Sm. 56—57°; Sd. 250°<sub>20-25</sub>. (2HCl,  $PtCl_4$ ) (*C. r.* 138, 1277 *C.* 1904 [2] 121).  
41) 3,8-Dimethyldiphenazonoxyd. Sm. 209° (*B.* 37, 26 *C.* 1904 [1] 523).  
42) Base (aus d. Äthyläther d. 3-Oxy-s-Diphenylhydrazin). Pikrat (*B.* 36, 4082 *C.* 1904 [1] 268).  
43) Aldehyd d. 4-Methylazobenzol-4'-Carbonsäure. Sm. 177,5° (*B.* 36, 2311 *C.* 1903 [2] 429).  
44) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -[2-Oxyphenyl]essigsäure. Sm. 113—114° (*B.* 37, 4084 *C.* 1904 [2] 1723).
- $C_{14}H_{12}O_2N_2$  \*4)  $\alpha$ -Phenyl- $\beta$ -Benzoylharnstoff. Sm. 210° (205°) (*B.* 36, 3220 *C.* 1903 [2] 1056; *Ann.* 30, 418 *C.* 1904 [1] 241).  
\*8)  $\alpha$ -Benzildioxim. K, Fe (*Soc.* 83, 44 *C.* 1903 [1] 442).  
\*21) s-Dibenzoylhydrazin. Sm. 237—239°. Na, K, Ph, Ag,  $HgCl$  (*J. pr.* [2] 69, 156 *C.* 1904 [1] 1274; *J. pr.* [2] 70, 268 *C.* 1904 [2] 1543; *J. pr.* [2] 70, 281 *C.* 1904 [2] 1566; *J. pr.* [2] 70, 303 *C.* 1904 [2] 1567).  
\*53) s-Di[Phenylamid] d. Oxalsäure. Sm. 245° (*A.* 332, 266 *C.* 1904 [2] 700).  
77) 2-[3-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 78—79° (*Soc.* 85, 1179 *C.* 1904 [2] 1216).  
78) 4-[3-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 96° (*B.* 36, 1024 *C.* 1903 [1] 1268).  
79) 4-[4-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 124,5° (*B.* 36, 1022 *C.* 1903 [1] 1268).  
80) 2-Nitro-3-Methylbenzylidenamidobenzol (2-Nitro-3-Phenylimido-methyl-1-Methylbenzol). Sm. 51,5° (*C.* 1900 [2] 751). — \*III, 40.  
81) 6-Nitro-3-Methylbenzylidenamidobenzol (4-Nitro-3-Phenylimido-methyl-1-Methylbenzol). Sm. 79° (*C.* 1900 [2] 751). — \*III, 40.  
82) 4,5-Diamido-9,10-Dioxyphenanthren. 2HCl (*B.* 36, 3749 *C.* 1904 [1] 38).  
83) 4,4'-Di[Oximidomethyl]biphenyl. Sm. 204° (*A.* 332, 77 *C.* 1904 [2] 43).  
84) 3-Nitro-9-Aethylecarbazol. Sm. 108° (*C.* 1904 [1] 1570).  
85) Phenylimidophenylamidoessigsäure. Sm. 100° u. Zers. (*Soc.* 85, 995 *C.* 1904 [2] 831).  
86) 2-Methylazobenzol-2'-Carbonsäure. Sm. 148° (*D.R.P.* 145063 *C.* 1903 [2] 973).  
87) Acetat d. 3-Oxyazobenzol. Sm. 67,5° (*B.* 36, 4104 *C.* 1904 [1] 271).  
88) Amid d. 4-Phenylacetylpyridin-3-Carbonsäure. Sm. 205—206° u. Zers. (*B.* 37, 2144 *C.* 1904 [2] 234).  
89) Monophenyldiamid d. Benzol-1,2-Dicarbonsäure (*J. pr.* [2] 55, 265). — \*II, 1054.
- $C_{14}H_{12}O_2N_4$  \*5) Formazylcarbonsäure. Sm. 163° (*J. pr.* [2] 67, 401 *C.* 1903 [1] 1346).  
\*10) 1,4,5,8-Tetraamido-9,10-Anthrachinon (*D.R.P.* 143804 *C.* 1903 [2] 475).
- $C_{14}H_{12}O_2N_6$  C 56,8 — H 4,0 — O 10,8 — N 28,4 — M. G. 296.  
1) 7,8-Disemicarbazonacenaphten. Sm. 271° (*G.* 33 [1] 47 *C.* 1903 [1] 882).
- $C_{14}H_{12}O_2Cl_2$  4)  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (*A.* 335, 170 *C.* 1904 [2] 1129).  
5) Di[2-Chlorphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 103—104° (*B.* 36, 2874 *C.* 1903 [2] 834).
- $C_{14}H_{12}O_2Br_2$  2)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (*A.* 335, 167 *C.* 1904 [2] 1128).  
3)  $\alpha$ -Methyläther d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan. Sm. 126° (*A.* 334, 381 *C.* 1904 [2] 1052).

- $C_{14}H_{12}O_2Br_2$  4) Di[2-Bromphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 110—111° (B. 36, 2875 C. 1903 [2] 834).
- $C_{14}H_{12}O_2S$  3) Benzyläther d. 5-Merkapto-2-Methyl-1,4-Benzochinon. Sm. 136 bis 137° (A. 336, 163 C. 1904 [2] 1300).
- $C_{14}H_{12}O_3N_2$  \*25) Anhydrid d. 3-Amidobenzol-1-Carbonsäure (A. 326, 241 C. 1903 [1] 868).
- 62) 3-Nitro-4-Acetylamidobiphenyl. Sm. 132° (B. 37, 881 C. 1904 [1] 1143).
- 63) Phenoxazinderivat (d. 4-Amido-1,3-Dioxybenzol-1-Aethyläther). Sm. 280°. HCl (J. pr. [2] 70, 329 C. 1904 [2] 1541).
- 64) 5[oder 6]-Oxy-2[oder 3]-Methylazobenzol-2'-Carbonsäure (D.R.P. 151279 C. 1904 [1] 1430).
- 65) 2-Oxymethylazobenzol-2'-Carbonsäure? Sm. 195° (C. r. 136, 372 C. 1903 [1] 635).
- 66) Monobenzoat d. 1,4-Dioximido-2-Methyl-1,4-Dihydrobenzol. Sm. 180° u. Zers. (G. 33 [1] 239 C. 1903 [1] 1409).
- 67) Verbindung (aus d. Verb.  $C_{15}H_{14}O_3N_2$ ) (J. pr. [2] 70, 370 C. 1904 [2] 1505).
- $C_{14}H_{12}O_3N_4$  7) 3,3'-Di[Oximidomethyl]azoxybenzol. Sm. 191° (B. 36, 3471 C. 1903 [2] 1269).
- $C_{14}H_{12}O_3S$  4) 4'-Oxy-4-Methyldisulfid-3'-Carbonsäure? Sm. 162—164° (D.R.P. 147634 C. 1904 [1] 131).
- $C_{14}H_{12}O_4N_2$  \*22) 3-Nitro-4-[2-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 212° (A. 332, 84 C. 1904 [1] 1569).
- \*26) 6,6'-Diamidobiphenyl-2,2'-Dicarbonsäure (B. 36, 3747 C. 1904 [1] 38).
- \*28) 4,4'-Diamidobiphenyl-3,3'-Dicarbonsäure (C. 1903 [1] 34).
- 61) 4,4'-Dinitro-3,3'-Dimethylbiphenyl. Sm. 228° (B. 37, 1401 C. 1904 [1] 1443).
- 62) 2'-Methyläther d. 5-Nitro-2-[4-Oxybenzyliden]amido-1-Oxybenzol. Sm. 160—161° (B. 36, 4124 C. 1904 [1] 273).
- 63) 1,4-Di[Succinylamido]benzol (A. 327, 25 C. 1903 [1] 1336).
- 64)  $\gamma$ -Keto- $\alpha$ -Oxy- $\alpha$ -[2-Nitrophenyl]- $\gamma$ -[2-Pyridyl]propan. Sm. 106° (B. 35, 4063 C. 1903 [1] 91).
- 65) 4,2'-Diamidobiphenyl-2,4'-Dicarbonsäure (D.R.P. 69541). — \*II, 1092.
- 66) 2-[2-Nitrobenzyl]amidobenzol-1-Carbonsäure. Sm. 205—206° (B. 37, 594 C. 1904 [1] 881).
- 67) 2-[4-Nitrobenzyl]amidobenzol-1-Carbonsäure. Sm. 208—210° (B. 37, 594 C. 1904 [1] 881).
- 68) 4,6-Dioxy-2-Methylazobenzol-3-Carbonsäure (Benzolazoorsellinsäure). Zers. bei 191° (B. 37, 1423 C. 1904 [1] 1418).
- 69) 4,6-Dioxy-2-Methylazobenzol-5-Carbonsäure (Benzolazoparaorsellinsäure). Zers. bei 190° (B. 37, 1424 C. 1904 [1] 1418).
- 70) Acetylderivat d. Verb.  $C_{13}H_{10}O_3N_2$ . Zers. bei 264° (R. 21, 154 C. 1904 [2] 194).
- 71) 2-Phenylamidoformiat d. 2-Oximido-5-Oxy-1-Keto-1,2-Dihydrobenzol-5-Methyläther. Sm. 168° (J. pr. [2] 70, 338 C. 1904 [2] 1542).
- $C_{14}H_{12}O_4N_4$  \*21)  $\alpha$ -Phenylhydrazon- $\alpha$ -[3,5-Dinitrophenyl]äthan. Sm. 212° (J. pr. [2] 69, 469 C. 1904 [2] 596).
- 26)  $\alpha$ -Nitro- $\alpha$ -[4-Nitrophenyl]azo- $\alpha$ -Phenyläthan. Sm. 118,5—119° (B. 36, 708 C. 1903 [1] 818).
- 27) Phenylhydrazid d. 2-Nitrophenyloxaminsäure. Sm. 181° u. Zers. (Soc. 81, 1568 C. 1903 [1] 157).
- 28) Phenylhydrazid d. 3-Nitrophenyloxaminsäure. Sm. 184° (Soc. 81, 1569 C. 1903 [1] 157).
- 29) Phenylhydrazid d. 4-Nitrophenyloxaminsäure. Sm. 217° u. Zers. (Soc. 81, 1570 C. 1903 [1] 158).
- $C_{14}H_{12}O_4N_6$  4) 4-Nitro-6-Nitroso-5-Methylnitrosamido-2-Methylazobenzol. Sm. 174° u. Zers. (J. pr. [2] 67, 529 C. 1903 [2] 239).
- $C_{14}H_{12}O_4S_4$  1) 4-Methyl-1,3-Phenyleneester d. 1-Methylbenzol-2,4-Di[Thiolsulfonsäure] (J. pr. [2] 68, 334 C. 1903 [2] 1172).
- $C_{14}H_{12}O_5N_4$  11) 2,2'-Dinitro-4'-Oxy-2,3'-Dimethylazobenzol. Sm. 147—150° (B. 37, 2582 C. 1904 [2] 659).

- $C_{14}H_{12}O_6S$  4) 4-[4-Methylbenzol]sulfonat d. 3,4-Dioxybenzol-1-Carbonsäure-aldehyd. Sm. 118° (D.R.P. 76493). — \*III, 76.
- $C_{14}H_{12}O_6N_4$  5) 2,4,6-Trinitro-3,4'-Dimethyldiphenylamin. Sm. 127° (B. 37, 2095 C. 1904 [2] 34).
- 6) 4-Methyläther d. 2,6-Dinitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 185° (B. 35, 4394 C. 1903 [1] 340).
- $C_{14}H_{12}O_6N_6$  2) 4,6-Dinitro-5-Methylnitrosamido-2-Methyldiphenylnitrosamin. Zers. bei 100° (J. pr. [2] 67, 562 C. 1903 [2] 241).
- $C_{14}H_{12}O_7N_4$  C 48,3 — H 3,4 — O 32,2 — N 16,1 — M. G. 348.
- 1) Äthyläther d. 2,4,6-Trinitro-3-Oxydiphenylamin. Sm. 174° (R. 21, 326 C. 1903 [1] 80).
- $C_{14}H_{12}O_7N_6$  C 44,7 — H 3,2 — O 29,8 — N 22,3 — M. G. 376.
- 1) 4,6-Dinitro-5-Methylnitramido-2-Methyldiphenylnitrosamin. Sm. 141° u. Zers. (J. pr. [2] 67, 563 C. 1903 [2] 241).
- $C_{14}H_{12}O_9N_8$  \*1) p-Tetrinitro-4-Dimethylamido-4'-Oxydiphenylamin. Sm. 228° u. Zers. (J. pr. [2] 69, 166 C. 1904 [1] 1268).
- $C_{14}H_{12}NCl$  \*3)  $\alpha$ -Chlor- $\alpha$ -Benzylimido- $\alpha$ -Phenylmethan. Sd. 110°<sub>80</sub> (B. 36, 19 C. 1903 [1] 510; Soc. 83, 326 C. 1903 [1] 581, 876).
- $C_{14}H_{12}NJ$  5) Jodmethylat d. Akridin (B. 37, 576 C. 1904 [1] 897).
- $C_{14}H_{12}N_2S_2$  \*3) Di[Phenylamid] d. Dithiooxalsäure. Sm. 134° (B. 37, 3722 C. 1904 [2] 1450).
- $C_{14}H_{12}N_3Cl$  1) 3-Chlor-4,6-Dimethyl-2-Phenyl-2,1,5-Benzotriazol. Sm. 179—180° (B. 36, 521 C. 1903 [1] 649).
- $C_{14}H_{12}N_4S$  4) 2,5-Di[3-Amidophenyl]-1,3,4-Thiodiazol. Sm. 239—240°. 2HCl (B. 35, 3935 C. 1903 [1] 38).
- 5) 3-Merkapto-1,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 208° (J. pr. [2] 67, 233 C. 1903 [1] 1262).
- $C_{14}H_{12}ON$  \*4) 4-Benzylidenamido-1-Methylbenzol. Sm. 29°; Sd. 178°<sub>11</sub> (Soc. 85, 1174 C. 1904 [2] 1215).
- \*7) Methyläther d. 4-Oxy-1-Phenylimidomethylbenzol. Sm. 63°. HJ (B. 36, 1539 C. 1903 [2] 53).
- \*11) 2-Amidophenyl-4-Methylphenylketon. Sm. 95° (B. 35, 4277 C. 1903 [1] 333).
- \*18)  $\alpha$ -Oximido- $\alpha\beta$ -Diphenyläthan. Sm. 96° (B. 36, 1497 C. 1903 [1] 1351).
- \*33) 3-Acetylamidoacenaphten. Sm. 186° (A. 327, 82 C. 1903 [1] 1227).
- \*43) Phenylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 125° (B. 36, 1012 C. 1903 [1] 1078).
- \*45) Methylphenylamid d. Benzolcarbonsäure. Sd. 331—332° (B. 37, 2681 C. 1904 [2] 521; B. 37, 2815 C. 1904 [2] 648).
- \*49) Benzylamid d. Benzolcarbonsäure. Sm. 104—105° (108°) (C. r. 135, 974 C. 1903 [1] 232; B. 36, 2289 C. 1903 [2] 564).
- \*55) 6-Amido-3-Methyldiphenylketon. Sm. 66°. HCl (Soc. 85, 595 C. 1904 [1] 1554).
- 69) Methyläther d. 2-Oxy-1-Phenylimidomethylbenzol (M. d. Phenyl-2-Oxybenzylidenamin). Sd. 235—236°<sub>30</sub> (B. 36, 1537 C. 1903 [2] 53).
- 70) Methyläther d. 3-Oxy-1-Phenylimidomethylbenzol. Sd. 223—225°<sub>18</sub> (B. 36, 1538 C. 1903 [2] 53).
- 71) 4-Amido-3-Methyldiphenylketon. Sm. 112°. HCl, H<sub>2</sub>SO<sub>4</sub> (Soc. 85, 592 C. 1904 [1] 1554).
- 72) 2-Methylamidodiphenylketon. Sm. 66° (B. 35, 4276 C. 1903 [1] 333).
- 73) 3-Acetylamidobiphenyl. Sm. 148° (B. 37, 883 C. 1904 [1] 1143).
- 74) 1-Oxy-2-[2-Pyridyl]-2,3-Dihydroinden. Sd. 140—160°<sub>10</sub>. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> (B. 36, 1655 C. 1903 [2] 39).
- 75) Methylhydroxyd d. Akridin. Jodid, Pikrat (B. 37, 576 C. 1904 [1] 897).
- 76) Base (aus Isopyrophtalon). Fl. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 36, 1660 C. 1903 [2] 40).
- $C_{14}H_{12}ON_3$  \*11) 5-Acetylamido-2-Methyl- $\alpha$ -oder- $\beta$ -Naphtimidazol. Sm. 288—290° (Soc. 83, 1186 C. 1903 [2] 1444).
- 25)  $\alpha$ -Benzylidenamido- $\alpha$ -Phenylharnstoff. Sm. 154° (B. 36, 1358 C. 1903 [1] 1340).
- 26) Diphenylmethylenamidoharnstoff (Benzophenonsemicarbazon). Sm. 164—165° (B. 37, 3180 C. 1904 [2] 991).

- $C_{14}H_{13}ON_3$  27) 3-Keto-4,6-Dimethyl-2-Phenyl-2,3-Dihydro-1,2,5-Benzotriazol. Sm. 233—234° (B. 36, 518 C. 1903 [1] 649).  
 28) Phenylamid d. 2-Methyldiazobenzol-N-Carbonsäure. Sm. 132—133° (B. 36, 1372 C. 1903 [1] 1343).  
 29) Phenylamid d. 4-Methyldiazobenzol-N-Carbonsäure. Sm. 129° u. Zers. (B. 36, 1376 C. 1903 [1] 1344).  
 30) Benzylidenhydrazid d. 2-Amidobenzol-1-Carbonsäure. Sm. 195° (J. pr. [2] 69, 97 C. 1904 [1] 729).
- $C_{14}H_{13}O_2N$  \*38)  $\alpha$ -Phenylamido- $\alpha$ -Phenylelessigsäure. Sm. 173—175° (B. 37, 4084 C. 1904 [2] 1723).  
 \*39) 2-Benzylamidobenzol-1-Carbonsäure. Sm. 174—176° (B. 37, 593 C. 1904 [1] 881).  
 \*41) 2-[2-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 185° (188 bis 189°) (B. 36, 2384 C. 1903 [2] 664; D.R.P. 145189 C. 1903 [2] 1097).  
 \*42) 2-[4-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 191—192° (D.R.P. 145189 C. 1903 [2] 1097).  
 \*49) Aethylester d.  $\delta$ -Cyan- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 115—116° (C. 1903 [2] 714).  
 \*55) 2-Amidobenzylester d. Benzolcarbonsäure. HCl (B. 37, 2260 C. 1904 [2] 212).  
 83) 4-Methoxyphenyl-2-Oxybenzylidenamin. Sm. 86° (A. 325, 248 C. 1903 [1] 632).  
 84) Methyläther d. 2-Amido-4'-Oxydiphenylketon. Sm. 76° (B. 35, 4278 C. 1903 [1] 333).  
 85) 2-Benzoylamido-1-Oxymethylbenzol. Sm. 132—133° (B. 37, 2261 C. 1904 [2] 212).  
 86) 3-Benzoylamido-1-Oxymethylbenzol. Sm. 115° (B. 37, 3941 C. 1904 [2] 1597).  
 87) 3-( $\alpha$ -Oximidoäthyl)acenaphten. Sm. 165° (A. 327, 93 C. 1903 [1] 1228).  
 88) Methyläther d. 3-[4-Oxyphenyl]-5-Phenylisoxazol. Sm. 128—129° (C. r. 137, 797 C. 1904 [1] 43).  
 89) 4-[ $\beta$ -Phenyläthyl]pyridin-3-Carbonsäure. Sm. 156—157°. Ag (B. 37, 2146 C. 1904 [2] 235).  
 90)  $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthan- $\alpha^2$ -Carbonsäure. HCl (B. 36, 3917 C. 1904 [1] 97).  
 91) Methylester d. Diphenylamin-2-Carbonsäure. Sd. 216,5—217,5° (B. 37, 3201 C. 1904 [2] 1472).  
 92) Imid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonsäure. Sm. 137° (B. 36, 1002 C. 1903 [1] 1132).
- $C_{14}H_{13}O_2N_3$  \*24) Phenylhydrazid d. Phenylloxaminsäure. Sm. 228° u. Zers. (Soc. 81, 1567 C. 1903 [1] 157).  
 \*30)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitrobenzyliden]hydrazin. Sm. 112—113° (B. 36, 373 C. 1903 [1] 577).  
 47)  $\alpha$ -Benzoylamido- $\beta$ -Phenylharnstoff. Sm. 210° (B. 37, 2330 C. 1904 [2] 313).  
 48)  $\alpha$ -Formylphenylamido- $\beta$ -Phenylharnstoff. Sm. 170° u. Zers. (J. pr. [2] 67, 263 C. 1903 [1] 1266).  
 49) Phenyl-2-Nitro-3-Methylbenzylidenhydrazin. Sm. 141—142° (C. 1900 [2] 751). — \*III, 40.  
 50) Phenyl-6-Nitro-3-Methylbenzylidenhydrazin. Sm. 131—132° (C. 1900 [2] 751). — \*III, 40.  
 51) 4-Nitrophenyl-4-Methylbenzylidenhydrazin. Sm. 198° (R. 22, 439 C. 1904 [1] 15).  
 52)  $\alpha$ -Phenylhydrazon- $\beta$ -Nitro- $\alpha$ -Phenyläthan. Sm. 105—105,5° (A. 325, 12 C. 1903 [1] 287).  
 53)  $\alpha$ -Nitro- $\alpha$ -Phenylazo- $\alpha$ -Phenyläthan. Fl. (B. 36, 708 C. 1903 [1] 818).  
 54) 4-Methyläther d.  $\alpha$ -Oximido- $\alpha$ -Phenylazo- $\alpha$ -[4-Oxyphenyl]methan (Phenylazoanisaldoxim). Sm. 147° (B. 36, 66 C. 1903 [1] 451).  
 55) 4-Methyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenyl]nitroso-methan. Zers. bei 69,5° (B. 36, 68 C. 1903 [1] 452).  
 56) 4'-Nitro-3,4-Dimethylazobenzol. Sm. 135,5° (B. 36, 1627 C. 1903 [2] 31).  
 57)  $\alpha\beta$ -Diphenylguanidin-2-Carbonsäure. Sm. 248° (C. 1903 [2] 831).

- $C_{14}H_{13}O_2N_3$  58) Methylester d. Phenylazobenzylidennitronsäure. Sm. 92° (B. 36, 90 C. 1903 [1] 453).  
 59) Phenylamid d. 4-Oxy-3-Methylphenylazoameisensäure. Sm. 198—199° u. Zers. (A. 334, 190 C. 1904 [2] 835).
- $C_{14}H_{13}O_3N$  34) 4-Nitrobenzyläther d. 4-Oxy-1-Methylbenzol. Sm. 91° (A. 224, 144). — II, 1060.  
 35) 4-Oxyphenylimid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonsäure. Sm. 178° (B. 36, 1002 C. 1903 [1] 1132).
- $C_{14}H_{13}O_3N_3$  \*8) 4-Nitro-2-Acetylamidodiphenylamin. Sm. 164° (J. pr. [2] 69, 41 C. 1904 [1] 521).  
 \*31) Methyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenyl]nitromethan. Sm. 113,5—114° (B. 36, 71 C. 1903 [1] 452).  
 35)  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxy-3-Methylbenzyliden]hydrazin +  $H_2O$ . Sm. 206—207° (wasserfrei) (B. 37, 3917 C. 1904 [2] 1594).  
 36)  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-4-Oxy-3-Methylbenzyliden]hydrazin. Sm. 153—155° (B. 37, 3927 C. 1904 [2] 1595).  
 37)  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-6-Oxy-3-Methylbenzyliden]hydrazin. Sm. 164—166° (B. 37, 3923 C. 1904 [2] 1594).  
 38) Methyläther d.  $\beta$ -[4-Oxybenzoyl]- $\alpha$ -Nitroso- $\alpha$ -Phenylhydrazin. Sm. 123° (B. 36, 367 C. 1903 [1] 577).
- $C_{14}H_{13}O_4N$  23) Aethylester d.  $\alpha$ -Cyan- $\beta$ -Acetoxyl- $\beta$ -Phenylakrylsäure. Fl. (Bl. [3] 31, 337 C. 1904 [1] 1135).  
 24) 2-Methylphenylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure. BiOH (Bl. [3] 29, 533 C. 1903 [2] 244).
- $C_{14}H_{13}O_4N_3$  14) Aethyl-2,4-Dinitrodiphenylamin. Sm. 97,5° (C. 1904 [1] 1570).  
 15) Methyl-2,4'-Dinitro-2-Methyldiphenylamin. Sm. 155° (J. pr. [2] 68, 258 C. 1903 [2] 1064).  
 16) 4-Methyläther d. 2-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 157—158° (B. 35, 4396 C. 1903 [1] 340).  
 17) 4-Methyläther d. 5-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 170° (B. 35, 4398 C. 1903 [1] 341).  
 18) 4-Methyläther d. 6-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 200—201° (B. 35, 4396 C. 1903 [1] 340).
- $C_{14}H_{13}O_4N_5$  \*1) 5,5'-Dinitro-2,2'-Dimethyldiazoamidobenzol. Sm. 200—201° (B. 37, 2579 C. 1904 [2] 659).  
 8) 4,4'-Dinitro-2,2'-Dimethyldiazoamidobenzol. Sm. 237° (Bl. [3] 31, 641 C. 1904 [2] 96).  
 9) 6,6'-Dinitro-2,2'-Dimethyldiazoamidobenzol. Sm. 191° (B. 37, 2583 C. 1904 [2] 659).
- $C_{14}H_{13}O_5N_3$  4) Methyläther d. 4,6-Dinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 139° (B. 37, 2094 C. 1904 [2] 34).  
 5) Aethyläther d. 4,6-Dinitro-3-Oxydiphenylamin. Sm. 170° (R. 23, 123 C. 1904 [2] 206).
- $C_{14}H_{13}O_5N_5$  2) 4,6-Dinitro-5-Methylnitrosamido-2-Methyldiphenylamin. Sm. 122° (J. pr. [2] 67, 563 C. 1903 [2] 241).
- $C_{14}H_{13}O_5P$  1) Benzoylverbindung d.  $\alpha$ -Oxybenzylphosphinsäure. Sm. 93° (C. r. 135, 1120 C. 1903 [1] 285).
- $C_{14}H_{13}O_6N$  C 57,7 — H 4,5 — O 33,0 — N 4,8 — M. G. 291.  
 1) Aethylester d. 4,5-Diketo-2-[3,4-Dioxyphenylmethylenäther]tetrahydropyrrol-3-Carbonsäure. Zers. bei 155°.  $NH_4$  (C. r. 138, 979 C. 1904 [1] 1415).  
 2) 1,6-Diacetat d. 4,5,6-Trioxy-2-Aethenyl-1-Oximidomethylbenzol-4,5-Methylenäther. Sm. 100—101° (B. 36, 1534 C. 1903 [2] 52).
- $C_{14}H_{13}O_6N_5$  4) 4,6-Dinitro-5-Methylnitramido-2-Methyldiphenylamin. Sm. 134° (J. pr. [2] 67, 523 C. 1903 [2] 238).
- $C_{14}H_{13}NS$  11) Phenyläther d.  $\beta$ -Imido- $\beta$ -Merkapto- $\alpha$ -Phenyläthan. HCl (B. 36, 3466 C. 1903 [2] 1243).  
 12) Phenylamid d. Phenylthioessigsäure. Sm. 87° (B. 37, 875 C. 1904 [1] 1004).
- $C_{14}H_{13}NS_2$  2) Phenylbenzylamidodithioameisensäure.  $NH_4$  (J. pr. [2] 67, 287 C. 1903 [1] 1306).
- $C_{14}H_{13}N_2Br$  6)  $\alpha$ -[3-Bromphenyl]hydrazon- $\alpha$ -Phenyläthan. Sm. 112—113° (113—115°) (Am. 21, 30; B. 36, 756 C. 1903 [1] 833).

- $C_{14}H_{13}N_2J$  \*2) Jodmethyolat d. 2-Phenylindazol. Sm. 211° u. Zers. (188°) (Bl. [3] 29, 746 C. 1903 [2] 629).
- 7) 4'-Jod-2,3'-Dimethylazobenzol. Sm. 64° (J. pr. [2] 69, 322 C. 1904 [2] 35).
- $C_{14}H_{13}ClJ_2$  3) p-Dijoddi[3-Methylphenyl]jodoniumchlorid. Sm. 160°. 2 +  $PtCl_4$  (A. 327, 283 C. 1903 [2] 351).
- $C_{14}H_{13}BrJ_2$  3) p-Joddi[3-Methylphenyl]jodoniumbromid. Sm. 154° (A. 327, 283 C. 1903 [2] 351).
- $C_{14}H_{14}ON_2$  \*5) s-Phenyl-4-Methylphenylharnstoff. Sm. 212° (B. 36, 1374 C. 1903 [1] 1343).
- \*20) Phenolblau. Sm. 160° (J. pr. [2] 69, 162 C. 1904 [1] 1268).
- \*39) 2,2'-Dimethylazoxybenzol. Sm. 59–60° (C. 1904 [2] 1383).
- \*41) 4,4'-Dimethylazoxybenzol. Sm. 75° (C. 1904 [2] 1383).
- \*62) Amid d.  $\alpha$ -Phenylamido- $\alpha$ -Phenyllessigsäure. Sm. 122–123° (B. 37, 4084 C. 1904 [2] 1723).
- 89)  $\alpha$ -Keto- $\alpha\beta$ -Di[4-Amidophenyl]äthan. Sm. 145°. 2HCl (D.R.P. 45371; A. 325, 74 C. 1903 [1] 463). — \*III, 163.
- 90)  $\alpha$ -Phenylnitrosamidoäthylbenzol. Fl. (B. 37, 2692 C. 1904 [2] 519).
- 91) 3-Oxy-2-Phenylhydrazonmethyl-1-Methylbenzol. Sm. 136° (B. 35, 4104 C. 1903 [1] 149).
- 92) isom. 3-Oxy-2-Phenylhydrazonmethyl-1-Methylbenzol. Sm. 168° (B. 35, 4104 C. 1903 [1] 149).
- 93) 5-Oxy-2-Phenylhydrazon-1-Methylbenzol. Sm. 88° u. Zers. (B. 35, 4105 C. 1903 [1] 149).
- 94) 2-Oxy-3-Phenylhydrazonmethyl-1-Methylbenzol. Sm. 97° (B. 35, 4104 C. 1903 [1] 149).
- 95) 4-Oxy-3-Phenylhydrazonmethyl-1-Methylbenzol. Sm. 149° (B. 35, 4104 C. 1903 [1] 149).
- 96) 6-Oxy-3-Phenylhydrazonmethyl-1-Methylbenzol. Zers. bei 147° (B. 35, 4105 C. 1903 [1] 149).
- 97) 2-Oxymethyl-4'-Methylazobenzol. Sm. 93° (C. r. 138, 1276 C. 1904 [2] 120; Bl. [3] 31, 868 C. 1904 [2] 661).
- 98) Äthyläther d. 2-Oxyazobenzol. Sm. 43–44°. (2HCl,  $PtCl_4$ ) (B. 36, 4071 C. 1904 [1] 267; B. 36, 4108 C. 1904 [1] 272).
- 99) Äthyläther d. 3-Oxyazobenzol. Sm. 63,5–64°; Sd. 200°<sub>22</sub> (B. 36, 4099 C. 1904 [1] 271).
- 100) Verbindung (aus o-Nitrobenzacetat). (2HCl,  $PtCl_4$ ) (Bl. [3] 31, 452 C. 1904 [1] 1498).
- $C_{14}H_{14}OJ_2$  3) p-Joddi[3-Methylphenyl]jodoniumhydrat. Salze siehe (A. 327, 283 C. 1903 [2] 351).
- $C_{14}H_{14}OS$  \*1) Dibenzylsulfoxyd. Sm. 133° (B. 36, 543 C. 1903 [1] 707).
- $C_{14}H_{14}O_2N_2$  \*48) 3-Amido-4-[2-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 169° (A. 332, 85 C. 1904 [1] 1569).
- \*49) 3-Amido-4-[4-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 183° (A. 332, 88 C. 1904 [1] 1569).
- \*77) Benzyl-5-Nitro-2-Methylphenylamin. Sm. 124° (D.R.P. 141297 C. 1903 [1] 1163).
- 82)  $\beta$ -Nitro- $\alpha$ -Phenylamido- $\alpha$ -Phenyläthan. HCl (B. 20, 2986; 29, 360; B. 36, 2564 C. 1903 [2] 494). — \*II, 86.
- 83) Dimethyläther d. 4,4'-Dioxyazobenzol. Sm. 160–162°; Sd. oberh. 315° (B. 36, 3162 C. 1903 [2] 947; B. 36, 3876 C. 1904 [1] 23).
- 84) Diamidomethylbiphenylcarbonsäure. Sm. 183° (D.R.P. 145063 C. 1903 [2] 973).
- 85) 2-Methyl-s-Diphenylhydrazin-2'-Carbonsäure. Sm. 136° (D.R.P. 145063 C. 1903 [2] 973).
- $C_{14}H_{14}O_2N_4$  21)  $\beta$ -[2-Methylphenyl]nitrosamido- $\alpha$ -Phenylharnstoff. Sm. 116° (B. 36, 1371 C. 1903 [1] 1343).
- 22)  $\alpha$ -Ureido- $\alpha\beta$ -Diphenylharnstoff. Sm. 210° u. Zers. (C. 1904 [2] 1028).
- 23) 2-Methylamido-1-[4-Nitrophenylhydrazon]methylbenzol. Sm. 245 bis 246° (B. 37, 984 C. 1904 [1] 1079).
- 24) 4'-Nitro-3-Methylamido-4-Methylazobenzol? Sm. 193–194° (C. 1903 [1] 400).
- 25) Dimethyläther d. 3,8-Diamido-2,9-Dioxydiphenazon. Sm. 244°. 2HCl (B. 37, 35 C. 1904 [1] 524).

- $C_{14}H_{14}O_2N_6$  C 56,4 — H 4,5 — O 10,7 — N 28,2 — M.<sup>g</sup>G. 298.  
 1) 4- $[\beta$ -Phenylsemicarbazol]-1-Semicarbazol-1,4-Dihydrobenzol. Zers. bei 242° (A. 334, 171 C. 1904 [2] 834).
- $C_{14}H_{14}O_2Br_2$  2) Aethylester d. Dibrombenznocearencarbonsäure. Sm. 95–96° (B. 36, 3505 C. 1903 [2] 1273).
- $C_{14}H_{14}O_2S$  \*5) Dibenzylsulfon. Sm. 150° (B. 36, 545 C. 1903 [1] 707).  
 11) 4-Benzyläther d. 4-Merkapto-2,5-Dioxy-1-Methylbenzol. Sm. 113 bis 114,5° (A. 336, 164 C. 1904 [2] 1300).  
 12) Verbindung (aus Merkaptomethylbenzol u. 2-Methyl-1,4-Benzochinon). Sm. 101–103,5° (A. 336, 162 C. 1904 [2] 1300).
- $C_{14}H_{14}O_3N_2$  \*10) Dimethyläther d. 2,2'-Dioxyazoxybenzol. Sm. 81° (J. pr. [2] 67, 150 C. 1903 [1] 870).  
 \*11) Dimethyläther d. 4,4'-Dioxyazoxybenzol. Sm. 144–146° (118,5°) (B. 36, 3159 C. 1903 [2] 947; B. 36, 3874 C. 1904 [1] 23; B. 37, 45 C. 1904 [1] 654; B. 37, 3421 C. 1904 [2] 1294).  
 34) 4-Methoxyphenyl-2-Oxybenzylnitrosamin. Sm. 91° (A. 325, 249 C. 1903 [1] 632).  
 35) 2,2'-Di[Oxymethyl]azoxybenzol. Sm. 123° (B. 36, 837 C. 1903 [1] 1028).  
 36)  $\alpha$ -Oxy- $\alpha$ -[3-Nitrophenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthan +  $H_2O$ . Sm. 82–83° (96° wasserfrei). HCl, (HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), Pikrat (B. 36, 1686 C. 1903 [2] 47).  
 37) Aethylester d. 5-Acetyl-4-Phenylpyrazol-3-Carbonsäure. Sm. 113° (A. 325, 184 C. 1903 [1] 646).  
 38) Aethylester d. 5-Benzoyl-4-Methylpyrazol-3-Carbonsäure. Sm. 119–120° (A. 325, 187 C. 1903 [1] 647).  
 39) Aethylester d. 3-Keto-4-Methyl-2-Phenyl-2,3-Dihydro-1,2-Diazin-6-Carbonsäure. Sm. 125° (R. 22, 284 C. 1903 [2] 108).
- $C_{14}H_{14}O_3N_4$  6) Methylester d. 2-Phenyl-1,2,3,4-Tetrazin-6-Dimethylmalonsäure. Sm. 88–89° (Soc. 83, 1254 C. 1903 [2] 1422).
- $C_{14}H_{14}O_4N_2$  9) Aethylester d. 5-[4-Acetylamidophenyl]isoxazol-3-Carbonsäure (B. 36, 2697 C. 1903 [2] 952).
- $C_{14}H_{14}O_4N_4$  15) 4,6-Dinitro-5-Methylamido-2-Methyldiphenylamin. Sm. 197° (J. pr. [2] 67, 536 C. 1903 [2] 239).
- $C_{14}H_{14}O_4Br_2$  1) Dimethylester d.  $\gamma\delta$ -Dibrom- $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha\alpha$ -Dicarbonsäure. Sm. 93° (B. 37, 1125 C. 1904 [1] 1210; A. 336, 223 C. 1904 [2] 1733).
- $C_{14}H_{14}O_4Br_4$  2) Dimethylester d.  $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha$ -Phenylbutan- $\delta\delta$ -Dicarbonsäure. Sm. 135° (A. 336, 225 C. 1904 [2] 1733).
- $C_{14}H_{14}O_4S_2$  4)  $\alpha$ -Phenylsulfon- $\alpha$ -Benzylsulfonmethan. Sm. 145–147° (B. 36, 300 C. 1903 [1] 500).
- $C_{14}H_{14}O_6N_4$  \*1) Dimethyläther d. 6,6'-Dinitro-4,4'-Diamido-3,3'-Dioxybiphenyl. Sm. 222° (B. 37, 35 C. 1904 [1] 524).  
 \*2) Dimethylamidobenzol + 1,3,5-Trinitrobenzol. Sm. 108–109° (Soc. 83, 1341 C. 1904 [1] 100).  
 5) Aethylamidobenzol + 1,3,5-Trinitrobenzol. Sm. 55–56° (Soc. 83, 1342 C. 1904 [1] 100).  
 6) Difurfurylidenhydrazid d. d-Weinsäure. Sm. 204° (Soc. 83, 1364 C. 1904 [1] 85).
- $C_{14}H_{14}O_6S_3$  1) Dimethylester d. Diphenylsulfid-4,4'-Disulfonsäure. Sm. 97° (118°) (R. 22, 358 C. 1904 [1] 23).
- $C_{14}H_{14}N_2S$  \*4) s-Phenyl-2-Methylphenylthioharnstoff. Sm. 139° (140°) (B. 36, 1141 C. 1903 [1] 1220; B. 36, 3848 C. 1904 [1] 89).  
 14) isom. s-Phenyl-2-Methylphenylthioharnstoff. Sm. 166–168° (B. 37, 159 C. 1904 [1] 582).  
 15) isom. s-Phenyl-4-Methylphenylthioharnstoff. Sm. 176–178° (B. 37, 159 C. 1904 [1] 582).
- $C_{14}H_{14}N_4S_2$  6) 2,4'-Biphenylendithioharnstoff (2,4'-Dithioureälobiphenyl). Sm. 201° (B. 36, 4092 C. 1904 [1] 269).
- $C_{14}H_{14}ClIJ$  3) 4-Aethyldiphenyljodoniumchlorid. Sm. 169°. 2 +  $HgCl_2$ , 2 +  $PtCl_4$  (A. 327, 292 C. 1903 [2] 352).  
 4) Di[3-Methylphenyl]jodoniumchlorid. Sm. 206°. +  $HgCl_2$ , +  $PtCl_4$  (A. 327, 292 C. 1903 [2] 352).  
 5) 2,3'-Dimethyldiphenyljodoniumchlorid. Sm. 183–185°. +  $HgCl_2$ , 2 +  $PtCl_4$  (A. 327, 278 C. 1903 [2] 350).

- $C_{14}H_{14}ClJ$  6) 3,4'-Dimethyldiphenyljodoniumchlorid. Sm. 186°. 2 +  $PtCl_4$  +  $2H_2O$  (A. 327, 280 C. 1903 [2] 351).
- $C_{14}H_{14}BrJ$  3) 4-Aethyldiphenyljodoniumbromid. Sm. 127° (A. 327, 292 C. 1903 [2] 352).
- 4) Di[3-Methylphenyl]jodoniumbromid. Sm. 146° (A. 327, 274 C. 1903 [2] 350).
- 5) 2,3'-Dimethyldiphenyljodoniumbromid. Sm. 172° (A. 327, 278 C. 1903 [2] 350).
- 6) 3,4'-Dimethyldiphenyljodoniumbromid. Sm. 184° (A. 327, 280 C. 1903 [2] 351).
- $C_{14}H_{15}ON$  24) Methylphenyl-2-Oxybenzylamin. Fl. (Ar. 240, 690 C. 1903 [1] 395).
- $C_{14}H_{15}ON_3$  28) Diphenylmethyramidoharnstoff (Benzhydrylsemicarbazid). Sm. 150 bis 160° (J. pr. [2] 67, 171 C. 1903 [1] 873).
- 29)  $\alpha$ -Amido- $\beta$ -Phenyl- $\alpha$ -Benzylharnstoff. Sm. 109—110° (B. 37, 2326 C. 1904 [2] 312).
- 30)  $\alpha$ -Amido- $\beta$ -Phenyl- $\alpha$ -[2-Methylphenyl]harnstoff. Sm. 136° (B. 36, 1369 C. 1903 [1] 1342).
- 31)  $\alpha$ -Amido- $\alpha$ -[3-Methylphenyl]- $\beta$ -Phenylharnstoff. Sm. 112° (B. 36, 1373 C. 1903 [1] 1343).
- 32)  $\alpha$ -Amido- $\alpha$ -[4-Methylphenyl]- $\beta$ -Phenylharnstoff. Sm. 184—185°. HCl (B. 36, 1374 C. 1903 [1] 1343).
- 33)  $\beta$ -[2-Methylphenyl]amido- $\alpha$ -Phenylharnstoff. Sm. 142° (B. 36, 1371 C. 1903 [1] 1343).
- 34)  $\beta$ -[3-Methylphenyl]amido- $\alpha$ -Phenylharnstoff. Sm. 159° (B. 36, 1373 C. 1903 [1] 1343).
- 35)  $\beta$ -[4-Methylphenyl]amido- $\alpha$ -Phenylharnstoff. Sm. 171° (B. 36, 1375 C. 1903 [1] 1343).
- 36) Aethyläther d. 4-Amido-3-Oxyazobenzol. Sm. 109—110,5° (B. 36, 4097 C. 1904 [1] 270).
- $C_{14}H_{15}OJ$  3) 4-Aethyldiphenyljodoniumhydrat. Salze siehe (A. 327, 292 C. 1903 [2] 352).
- 4) Di[3-Methylphenyl]jodoniumhydrat. Salze siehe (A. 327, 273 C. 1903 [2] 350).
- 5) 2,3'-Dimethyldiphenyljodoniumhydrat. Salze siehe (A. 327, 278 C. 1903 [2] 351).
- 6) 3,4'-Dimethyldiphenyljodoniumhydrat. Salze siehe (A. 327, 280 C. 1903 [2] 351).
- $C_{14}H_{15}O_2N$  35) 4'-Methylamido-2,4-Dioxydiphenylmethan. Sm. 111—112°. HCl (M. 23, 992 C. 1903 [1] 289).
- 36) 4-Methoxyphenyl-2-Oxybenzylamin. Sm. 127° (A. 325, 248 C. 1903 [1] 632).
- 37) 1-Methyläther d. 2-[2-Oxybenzyl]amido-1-Oxybenzol. Sm. 70—71° (Ar. 240, 689 C. 1903 [1] 395).
- 38) 1-Methyläther d. 4-[2-Oxybenzyl]amido-1-Oxybenzol. Sm. 128° (Ar. 240, 681 C. 1903 [1] 395).
- 39) 1-Benzyläther d. 5-Amido-4-Oxy-1-Oxymethylbenzol. Sm. 76—78° (D.R.P. 148977 C. 1904 [1] 699).
- 40)  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\beta$ -[2-Pyridyl]propan. Sm. 106—107°. (2HCl,  $PtCl_4$ ), Pikrat (J. pr. [2] 69, 312 C. 1904 [1] 1613).
- 41)  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\beta$ -[4-Pyridyl]propan. Sm. 194°. (2HCl,  $PtCl_4$ ) (J. pr. [2] 69, 316 C. 1904 [1] 1613).
- 42) Benzozat d. lab. 4-Oximido-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 142—143° (C. 1903 [1] 329; A. 329, 372 C. 1904 [1] 517).
- 43) Benzozat d. stab. 4-Oximido-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 90—91° (C. 1903 [1] 329; A. 329, 373 C. 1904 [1] 517).
- $C_{14}H_{15}O_2N_3$  \*6) 4-Dimethylamido-3'-Oxydiphenylnitrosamin. Sm. 125—126° (J. pr. [2] 69, 237 C. 1904 [1] 1269).
- 9) Aethyl-4-Nitro-2-Amidodiphenylamin. Sm. 86,5°.  $H_2SO_4$  (C. 1904 [1] 1570).
- 10) 4-Nitroso-4-Dimethylamido-3'-Oxydiphenylamin. Sm. 164° (J. pr. [2] 69, 238 C. 1904 [1] 1269).
- 11) 3-Methyläther d. 2-Amido-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 165° (C. 1903 [2] 31).

- $C_{14}H_{15}O_2N_3$  12) 4- $[\beta$ -Phenylhydrazido]-2,6-Dimethylpyridin-3-Carbonsäure. Sm. 176—177° HCl (*B.* 36, 517 *C.* 1903 [1] 648).
- $C_{14}H_{15}O_2P$  \*1) Dibenzylphosphinsäure. Sm. 190—191° (*C. r.* 139, 675 *C.* 1904 [2] 1638).
- $C_{14}H_{15}O_3N$  17) Methylester d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\beta$ -Phenylakrylpropyläthersäure. Sm. 84° (*C. r.* 136, 691 *C.* 1903 [1] 920; *Bl.* [3] 31, 342 *C.* 1904 [1] 1135).
- 18) Phenylmonamid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonensäure. Sm. 155° (*B.* 36, 999 *C.* 1903 [1] 1131).
- $C_{14}H_{15}O_3N_3$  2) Aethylester d. Acetyl-4-Methylphenylhydrazoncyanessigsäure. lab. Modif. Sm. 216°, stab. Modif. Sm. 218—219° (*J. pr.* [2] 67, 407 *C.* 1903 [1] 1347).
- $C_{14}H_{15}O_4N$  \*1) i- $\alpha$ -[1,2-Phtalyl]amidopentan- $\alpha$ -Carbonsäure. Sm. 141,5—142° (*B.* 37, 1695 *C.* 1904 [1] 1525).
- 13) Aethylester d.  $\alpha$ -Cyan- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Dimethyläthersäure. Sm. 156° (*C.* 1904 [2] 903).
- 14) 4-Oxyphenylmonamid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonensäure. Sm. 170—175° (*B.* 36, 999 *C.* 1903 [1] 1131).
- $C_{14}H_{15}O_4N_6$  C 53,0 — H 4,7 — O 20,2 — N 22,1 — M. G. 317.
- 1) 4,6-Dinitro-5-Methylamido-2-Methyl-s-Diphenylhydrazin. Sm. 155° (*J. pr.* [2] 67, 537 *C.* 1903 [2] 239).
- $C_{14}H_{15}O_4Br$  2) Dimethylester d.  $\gamma$ -Brom- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta\delta$ -Dicarbonensäure. Fl. (*A.* 336, 200 *C.* 1904 [2] 1731).
- $C_{14}H_{15}O_4Br_3$  1) Dimethylester d.  $\alpha\beta\gamma$ -oder  $\alpha\beta\delta$ -Tribrom- $\alpha$ -Phenylbutan- $\delta\delta$ -Dicarbonensäure. Sm. 126—127° (*A.* 336, 226 *C.* 1904 [2] 1733).
- $C_{14}H_{15}O_4P$  \*3) Aethyldiphenylester d. Phosphorsäure (D.R.P. 142971 *C.* 1903 [2] 171).
- 4) Di[ $\alpha$ -Oxybenzyl]unterphosphorige Säure. Sm. 230° (*C.* 1904 [2] 1709).
- $C_{14}H_{15}O_5N$  3) Aethylester d. 4-Acetylamidobenzoylbrenztraubensäure. Sm. 80 bis 124°. Cu (*B.* 36, 2696 *C.* 1903 [2] 952).
- 4) Aethylester d. 4-Aethoxylphtalylamidoessigsäure. Sm. 118° (*B.* 37, 1974 *C.* 1904 [2] 236).
- 5) Aethylester d. 4,5-Diketo-2-[4-Methoxyphenyl]tetrahydropyrrol-3-Carbonsäure. Zers. bei 160°.  $NH_4$  (*C. r.* 138, 979 *C.* 1904 [1] 1415).
- 6) Aethylester d. 4,6[oder 4,7]-Dioxy-1-Keto-1,2-Dihydroisochinolin-6[oder 7]-Aethyläther-3-Carbonsäure. Zers. bei 233° (*B.* 37, 1974 *C.* 1904 [2] 236).
- $C_{14}H_{15}O_5Br_3$  3)  $\alpha$ ,4-Diacetat d. 2,5-Dibrom-3,4-Dioxy-1- $[\beta$ -Brom- $\alpha$ -Oxypropyl]-benzol. Sm. 139—140° (*A.* 329, 27 *C.* 1903 [2] 1436).
- $C_{14}H_{15}O_6N$  \*2) Diäthylester d.  $\alpha$ -[3-Nitrophenyl]äthen- $\beta\beta$ -Dicarbonensäure. Sm. 75—76° (*Soc.* 83, 723 *C.* 1903 [2] 55).
- 4) 6-Methylester-4-Aethylester d. 2-Keto-3,4-Dihydro-1,4-Benzoxazin-4-Methylcarbonsäure-6-Carbonsäure. Sm. 136° (*A.* 325, 336 *C.* 1903 [1] 771).
- 5) Aethylester d. 4,5-Diketo-2-[4-Oxy-3-Methoxyphenyl]tetrahydropyrrol-3-Carbonsäure. Zers. bei 180°.  $NH_4$  (*C. r.* 138, 979 *C.* 1904 [1] 1415).
- 6) Diacetat d. 4-Diacetylamido-1,3-Dioxybenzol. Sm. 106—108° (*B.* 35, 4193 *C.* 1903 [1] 145; *B.* 35, 4204 *C.* 1903 [1] 146; *J. pr.* [2] 70, 326 *C.* 1904 [2] 1541).
- 7) Mono[4-Aethoxyphenylamid] d. Akonitsäure +  $H_2O$ . Sm. 72° (129° wasserfrei). +  $C_2H_4O_2$  (*C.* 1903 [2] 565).
- $C_{14}H_{15}O_6N$  2) Triacetat d. 5-Nitro-4-Oxy-3-Dioxymethyl-1-Methylbenzol. Sm. 132 bis 132,5° (*B.* 37, 3926 *C.* 1904 [2] 1595).
- $C_{14}H_{15}NCl_2$  1) Base (aus 2- oder 4-Methyl-1,2,3,4-Tetrahydrocarbazol). Sm. 125—126°. Pikrat (*C.* 1904 [2] 343).
- $C_{14}H_{15}NS$  1) 4-Amido-2,4'-Dimethyldiphenylsulfid (*J. pr.* [2] 68, 289 *C.* 1903 [2] 995).
- 2) 4-Amido-3,4'-Dimethyldiphenylsulfid. Sm. 48—49°. HCl, (2HCl,  $PtCl_4$ ),  $H_2SO_4$ , Oxalat, Pikrat (*J. pr.* [2] 68, 279 *C.* 1903 [2] 994).
- $C_{14}H_{15}N_3S$  \*8)  $\alpha$ -Phenylamido- $\beta$ -Benzylthioharnstoff. Sm. 162° (*J. pr.* [2] 67, 217 *C.* 1903 [1] 1260).

- $C_{14}H_{15}N_3S$  \*17)  $\alpha$ -Amido- $\beta$ -Phenyl- $\alpha$ -Benzylthioharnstoff. Sm. 123° (B. 37, 2328 C. 1904 [2] 313).  
 20)  $\alpha$ -Benzylamido- $\beta$ -Phenylthioharnstoff. Sm. 155° (B. 37, 2329 C. 1904 [2] 313).
- $C_{14}H_{16}ON_2$  \*9) Aethyläther d. 4,4'-Diamido-3-Oxybiphenyl. Sm. 139° (B. 36, 4072 C. 1904 [1] 267).  
 \*10) Aethyläther d. 6,4'-Diamido-3-Oxybiphenyl (B. 36, 4087 C. 1904 [1] 269).  
 \*20) 4-Dimethylamido-3'-Oxydiphenylamin. Sm. 99°. HCl, H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 69, 232 C. 1904 [1] 1269).  
 \*21) 4-Dimethylamido-4'-Oxydiphenylamin. Sm. 161° (J. pr. [2] 69, 161 C. 1904 [1] 1267).  
 26) Aethyläther d. 2-Oxy-s-Diphenylhydrazin. Sm. 66° (B. 36, 4072 C. 1904 [1] 267).  
 27) Aethyläther d. 3-Oxy-s-Diphenylhydrazin. Sm. 74—75° (B. 36, 4113 C. 1904 [1] 272).  
 28) Aethyläther d. 4-Oxy-s-Diphenylhydrazin. Sm. 86° (B. 36, 3848 C. 1904 [1] 89).  
 29) 1-Phenacetylamido-2,5-Dimethylpyrrol. Sm. 110—111°; Sd. 245 bis 265°<sub>28</sub> (B. 35, 4321 C. 1903 [1] 336).  
 30) 1-Benzoyl-3-Methyl-5-Propylpyrazol (oder 1-Benzoyl-5-Methyl-3-Propylpyrazol). Fl. (Bl. [3] 27, 1087 C. 1903 [1] 226).
- $C_{14}H_{16}ON_4$  10) Di[ $\beta$ -2-Pyridyläthyl]nitrosamin. Fl. (HCl, PtCl<sub>4</sub>) (B. 37, 173 C. 1904 [1] 673).
- $C_{14}H_{16}O_2N_2$  21) Aethyl ester d.  $\alpha$ -Cyan- $\beta$ -Aethylamido- $\beta$ -Phenylakrylsäure. Sm. 90—91° (Bl. [3] 31, 343 C. 1904 [1] 1135).  
 22) Acetat d. 3,3-Dimethyl-2-[ $\alpha$ -Oximidoäthyl]pseudoindol. Sm. 149° (G. 32 [2] 431 C. 1903 [1] 838).
- $C_{14}H_{16}O_3N_2$  16) 2,4,6-Triketo-5,5-Diäthyl-1-Phenylhexahydro-1,3-Diazin. Sm. 197° (D.R.P. 146496 C. 1903 [2] 1484; A. 335, 349 C. 1904 [2] 1381).
- $C_{14}H_{16}O_3N_4$  4) 5-[4-Dimethylamidophenyl]imido-2,4,6-Triketo-1,3-Dimethylhexahydro-1,3-Diazin (Tetramethylureidindocanilin). Sm. 168° (A. 333, 38 C. 1904 [2] 770).
- $C_{14}H_{16}O_4N_2$  \*1) Coffearin (C. 1904 [2] 837).  
 12)  $\gamma$ -Aethyl ester d.  $\alpha$ -Phenylhydrazon- $\beta$ -Oxybutan- $\alpha\gamma$ -Dicarbonsäure- $\alpha\gamma$ -Lakton. Sm. 120° (R. 22, 283 C. 1903 [2] 107).
- $C_{14}H_{16}O_4N_4$  C 55,3 — H 5,3 — O 21,0 — N 18,4 — M. G. 304.  
 1) Methyl ester d. 2-Phenylamido-1,2,3,6-Oxtriazin-5-[Isobutyryl- $\alpha$ -Carbonsäure]. Sm. 139° (u. 154°) (Soc. 83, 1250 C. 1903 [2] 1422).
- $C_{14}H_{16}O_5N_2$  \*5) Diäthylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 72—73° (Bl. [3] 31, 78 C. 1904 [1] 580; Bl. [3] 31, 94 C. 1904 [1] 581).  
 6) Monooxim d. 4-Acetylamidobenzoylbrenztraubensäureäthylester. Sm. 177—178° (B. 36, 2697 C. 1903 [2] 952).  
 7) Diäthylester d. isom.  $\beta$ -Phenylhydrazon- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 126—127° (Bl. [3] 31, 79 C. 1904 [1] 580; Bl. [3] 31, 95 C. 1904 [1] 581).  
 8) Butyrat d. 5-Oxy-3-Methyl-1-Phenylpyrazol. Sd. 172° (B. 36, 530 C. 1903 [1] 642).
- $C_{14}H_{16}O_6N_4$  C 52,5 — H 5,0 — O 25,0 — N 17,5 — M. G. 320.  
 1) 3,6'-Dinitro-4'-Oxy-2,5,2',5'-Tetramethylazobenzol. Sm. 226—227° (B. 37, 2593 C. 1904 [2] 660).
- $C_{14}H_{16}O_6Br_2$  3)  $\alpha$ ,4'-Diacetat d. 5-Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3-Methyläther. Sm. 112—114° (A. 329, 19 C. 1903 [2] 1435).
- $C_{14}H_{16}O_6N_2$  11) 1,3-Phenylendisuccinaminsäure. Sm. 215°. Zers. bei 220—221° (A. 327, 31 C. 1903 [1] 1336).  
 12) 1,4-Phenylendisuccinaminsäure. Sm. 262° (A. 327, 33 C. 1903 [1] 1336).  
 13) Dilaktam d.  $\gamma\delta$ -Diimidohexan- $\beta\beta\epsilon\epsilon$ -Tetracarbonsäure- $\beta\epsilon$ -Diäthylester. Sm. 150° (A. 332, 127 C. 1904 [2] 189).  
 14) Dicyanmalonmethylacetessigesterlaktam. Sm. 139° (A. 332, 130 C. 1904 [2] 190).  
 15) Furfurylamid d. d-Weinsäure. Sm. 179° (Soc. 83, 1346 C. 1904 [1] 83).

- $C_{14}H_{16}O_8Br_2$  1)  $\alpha$ -Acetat d. 6-Brom-2,3,4,5-Tetraoxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]-benzol-3,4-Methylenäther-2,5-Dimethyläther? Sm. 114—115° (*C.* 1903 [1] 970).
- $C_{14}H_{16}O_7N_4$  C 47,7 — H 4,5 — O 31,8 — N 15,9 — M. G. 352.
- 1) Lakton d.  $\gamma$ -Semicarbazon- $\alpha$ -Oxy- $\alpha$ -[6-Nitro-3,4-Dimethoxyphenyl]butan-2-Carbonsäure (Semicarbazon d. Acetylinitromekonin). Sm. 218° (*B.* 36, 2209 *C.* 1903 [2] 443).
- $C_{14}H_{16}O_8J_2$  2) Tetraacetat d. 1,3-Dijodobenzol. Sm. 204° (*B.* 37, 1305 *C.* 1904 [1] 1340).
- $C_{14}H_{16}NCl$  2) 4-[ $\alpha$ -Chloräthyl]-1-Methylbenzol + Pyridin. 2 +  $PtCl_4$  (*B.* 36, 1636 *C.* 1903 [2] 26).
- $C_{14}H_{16}NJ$  2) Dimethyldiphenylammoniumjodid. Sm. 163° (*B.* 36, 2488 *C.* 1903 [2] 564).
- $C_{14}H_{16}N_2Cl_2$  1) Diphenochinon- $NN'$ -Dimethyldiimoniumchlorid. 2 +  $PtCl_4$  (*B.* 37, 3774 *C.* 1904 [2] 1548).
- $C_{14}H_{16}N_4S$  1) 4-Phenylthiosemicarbazido-2,6-Dimethylpyridin. Sm. 199°. Pikrat (*B.* 36, 1117 *C.* 1903 [1] 1185).
- $C_{14}H_{17}ON$  12) 4-[ $\alpha$ -Oxyäthyl]-1-Methylbenzol + Pyridin. Chlorid, 2Chlorid +  $PtCl_4$ , Pikrat (*B.* 36, 1636 *C.* 1903 [2] 26).
- $C_{14}H_{17}ON_3$  6) 4'-Amido-4-Dimethylamido-3'-Oxydiphenylamin (*J. pr.* [2] 69, 238 *C.* 1904 [1] 1269).
- 7) 5-Oxy-1-Phenyl-3-Hexahydrophenyl-1,2,4-Triazol. Sm. 196—197° (*B.* 36, 1096 *C.* 1903 [1] 1140).
- $C_{14}H_{17}O_2N$  22)  $\beta$ -Diketo- $\gamma$ -[4-Dimethylamidobenzyliden]pentan. Sm. 95° (*B.* 37, 1744 *C.* 1904 [1] 1599).
- 23) Base d. Pyridyliumchlorid  $C_{14}H_{16}ONCl$ . Pikrat (*B.* 36, 3590 *C.* 1903 [2] 1365).
- 24) Benzoat d. 2-Oximido-1-Methylhexahydrobenzol. Sm. 70—72° (*A.* 329, 376 *C.* 1904 [1] 517).
- 25) Benzoat d. d-3-Oximido-1-Methylhexahydrobenzol. Sm. 96—97° (*A.* 332, 339 *C.* 1904 [2] 652).
- 26) Benzoat d. l-3-Oximido-1-Methylhexahydrobenzol. Sm. 82—83° (*A.* 332, 340 *C.* 1904 [2] 653).
- 27)  $\alpha$ -Benzoat d. i-3-Oximido-1-Methylhexahydrobenzol. Sm. 105—106° (*A.* 332, 345 *C.* 1904 [2] 653).
- 28)  $\beta$ -Benzoat d. i-3-Oximido-1-Methylhexahydrobenzol. Sm. 70—72° (*A.* 332, 346 *C.* 1904 [2] 653).
- $C_{14}H_{17}O_2N_3$  7) Aethylester d. 1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-3-Imidoameisensäure (Iminopyrinäthylurethan). Sm. 178° (*B.* 36, 3284 *C.* 1903 [2] 1190).
- $C_{14}H_{17}O_3N$  18) Diäthyläther d. 3-Methyl-5-[2,4-Dioxyphenyl]isoxazol. Sm. 126,5° (*B.* 37, 356 *C.* 1904 [1] 670).
- 19) Anhydrohydrastininaceton. Sm. 72°. (2 HCl,  $PtCl_4$ ) (*B.* 37, 214 *C.* 1904 [1] 590).
- $C_{14}H_{17}O_3N_3$  4) 4-[ $\beta$ -Oximido- $\beta$ -4-Isopropylphenyläthyl]-1,2,3,6-Dioxdiazin. Sm. 167,5° u. Zers. (*A.* 330, 259 *C.* 1904 [1] 947).
- $C_{14}H_{17}O_5N$  7) Oxim d. Mekoninmethylethylketon. Sm. 109—112° (*M.* 25, 1056 *C.* 1904 [2] 1644).
- 8) Diäthylester d. 4-Acetylamidobenzol-1,3-Dicarbonsäure. Sm. 108° (*D.R.P.* 102894). — \*II, 1063.
- $C_{14}H_{17}O_5N_3$  3)  $\alpha$ -Benzoylamidopropionylamidooacetylamidooessigsäure. Sm. 204 bis 205°. Ag (*J. pr.* [2] 70, 156 *C.* 1904 [2] 1395).
- 4) Methylester d.  $\delta$ -Oximido- $\epsilon$ -Phenylhydroxyhydrizon- $\gamma$ -Keto- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 133—140°.  $H_2SO_4$  (*See.* 83, 1243 *C.* 1903 [2] 1421).
- $C_{14}H_{17}O_5N_5$  C 50,1 — H 5,1 — O 23,9 — N 20,9 — M. G. 335.
- 1) Verbindung (aus d.  $\beta$ -Dicyanacetessigsäureäthylester). Sm. 219° (*A.* 332, 137 *C.* 1904 [2] 190).
- $C_{14}H_{17}O_6N$  12)  $\alpha$ ,N-Diäthylester d. Phenylamidoessigsäure-2-Carbonsäure-N-Carbonsäure. Sm. 114—116° (*D.R.P.* 138207 *C.* 1903 [1] 305).
- 13) 2,N-Diäthylester d. Phenylamidoessigsäure-2-Carbonsäure-N-Carbonsäure. Sm. 106—108° (*D.R.P.* 138207 *C.* 1903 [1] 305).
- $C_{14}H_{18}ON_2$  6) Nitril d.  $\alpha$ -[4-Oxyphenyl]- $\alpha$ -[1-Piperidyl]essigmethyläthersäure. Sm. 75—76° (*B.* 37, 4086 *C.* 1904 [2] 1724).

- $C_{14}H_{18}OBr_2$  1)  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]pentan. Sm. 141° (A. 330, 259 C. 1904 [1] 947).
- $C_{14}H_{18}O_2N_2$  \*3) 5,8-Di[Acetyl-amido]-1,2,3,4-Tetrahydronaphtalin. Sm. 291—292° (Soc. 85, 755 C. 1904 [2] 448).
- 13)  $\gamma$ -Nitrimido- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methyl- $\alpha$ -Buten. Sm. 169,5° (A. 330, 262 C. 1904 [1] 947).
- $C_{14}H_{18}O_2N_4$  3)  $\gamma$ -Semicarbazon- $\delta$ -Oximido- $\alpha$ -[4-Isopropylphenyl]- $\alpha$ -Buten. Sm. 176° u. Zers. (C. 1904 [1] 28; A. 330, 254 C. 1904 [1] 946).
- $C_{14}H_{18}O_3N_2$  8) Aethylester d.  $\alpha$ -[4-Dimethylamidophenyl]imido- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm. 63,5° (B. 36, 3233 C. 1903 [2] 941).
- 9) Isobutylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Ketobuttersäure. Sm. 98—99° (C. r. 138, 1222 C. 1904 [2] 27; C. r. 139, 134 C. 1904 [2] 588).
- $C_{14}H_{18}O_4N_2$  9) Methyl ester d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 104° (J. pr. [2] 70, 206 C. 1904 [2] 1459).
- 10) Aethylester d.  $\alpha$ -Benzoylamidoacetylamidopropionsäure. Sm. 124 bis 126° (J. pr. [2] 70, 116 C. 1904 [2] 1036).
- 11) Aethylester d.  $\alpha$ -Benzoylamidopropionylamidoessigsäure. Sm. 108° (J. pr. [2] 70, 153 C. 1904 [2] 1395).
- $C_{14}H_{18}O_4S_2$  1) 1,4-Diacetat d. 2,5-Dimerkapto-1,4-Dioxybenzol-2,5-Diäthyläther. Sm. 133—134° (A. 336, 159 C. 1904 [2] 1300).
- $C_{14}H_{18}O_5N_2$  6) Aethylester d.  $\beta$ -Amido- $\alpha$ -Benzoylamidoacetoxylpropionsäure. Sm. 96° (J. pr. [2] 70, 203 C. 1904 [2] 1459).
- 7) Diäthylester d. 2-Methylphenylnitrosamidomalonsäure. Fl. (Am. 30, 138 C. 1903 [2] 721).
- 8) Diäthylester d. 3-Methylphenylnitrosamidomalonsäure. Sm. 58 bis 58,5° (Am. 30, 140 C. 1903 [2] 721).
- 9) Diäthylester d. 4-Methylphenylnitrosamidomalonsäure (Am. 30, 143 C. 1903 [2] 721).
- $C_{14}H_{18}O_5Br_2$  \*1) 3,4-Dimethylenäther-2,5-Dimethyläther- $\alpha$ -Aethyläther d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -(6-Brom-2,3,4,5-Tetraoxyphenyl)propan. Sm. 72—73° (C. 1903 [1] 970).
- $C_{14}H_{18}O_6S_2$  1) Aethylester d.  $\alpha$ -[2,4-Dimethylphenylthiosulfon]acetessigsäure. Fl. (J. pr. [2] 70, 386 C. 1904 [2] 1720).
- $C_{14}H_{18}O_7S$  1) Benzylidenmalonäthylestererhydrosulfonsäure. K +  $1\frac{1}{2}H_2O$  (B. 37, 4058 C. 1904 [2] 1649).
- $C_{14}H_{18}O_7Hg$  1) Verbindung (aus Apio). Sm. 157—158° (B. 36, 3582 C. 1903 [2] 1363).
- $C_{14}H_{18}O_8N_2$  \*1) Verbindung (aus Dimethylacetessigsäuremethyl ester). Sm. 65° (Soc. 83, 1232 C. 1903 [2] 1420).
- $C_{14}H_{18}O_8S_2$  1) 1,3-Phenylendi[ $\alpha$ -Sulfonbuttersäure]. Ba (J. pr. [2] 68, 329 C. 1903 [2] 1171).
- 2) Diäthylester d. 1,3-Phenylendi[Sulfonessigsäure]. Sm. 86—87° (J. pr. [2] 68, 326 C. 1903 [2] 1171).
- $C_{14}H_{18}O_9Hg$  1) Quecksilberderivat d. 2,3,4,5-Tetraoxy-1-[ $\alpha\beta$ -Dioxypropyl]benzol-3,4-Methylenäther-2,5-Dimethyläther. Sm. 174° u. Zers. (B. 36, 3584 C. 1903 [2] 1364).
- $C_{14}H_{18}N_2S$  5) Isobutyläther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sd. 313 bis 314° (A. 331, 236 C. 1904 [1] 1221).
- $C_{14}H_{18}ON$  13)  $\gamma$ -Oximido- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methyl- $\alpha$ -Buten. Sm. 116,5° (A. 330, 262 C. 1904 [1] 947).
- 14) C-Allylcyancampher. Sd. 155—165°<sub>10</sub> (C. r. 136, 789 C. 1903 [1] 1085).
- 15) O-Allylcyancampher. Sd. 140—150°<sub>10</sub> (C. r. 136, 789 C. 1903 [1] 1085).
- $C_{14}H_{18}ON_3$  C 68,6 — H 7,8 — O 6,5 — N 17,1 — M. G. 245.
- 1) 3-Phenylsemicarbazon-1-Methylhexahydrobenzol. Sm. 169—170° (B. 37, 3181 C. 1904 [2] 991).
- 2) 4-Dimethylamido-3-Keto-5-Methyl-1-Aethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 107° (C. 1897 [1] 1140).
- 3) 4-Methyläthylamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 92° (D. R. P. 145603 C. 1903 [2] 1225).
- $C_{14}H_{18}O_2N$  17) 5-Oxy-3-Methyl-1-Hexylbenzoxazol. Sm. 99° (B. 37, 3109 C. 1904 [2] 994).

- $C_{14}H_{19}O_2N$  18) Phenylamidoformiat d. Oxymethylhexahydrobenzol. Sm. 82° (*C. r.* 137, 61 *C.* 1903 [2] 551).  
 19) Phenylamidoformiat d. 1-Oxy-1-Methylhexahydrobenzol. Sm. 105° (*C. r.* 138, 1324 *C.* 1904 [2] 219).  
 20) Phenylamidoformiat d. 2-Oxy-1-Methylhexahydrobenzol. Sm. 103 bis 104° (*A.* 329, 375 *C.* 1904 [1] 517).
- $C_{14}H_{19}O_2N_3$  3) 4-Nitrophenylhydrazondimethylhexahydrobenzol. Sm. 168° (*B.* 36, 957 *C.* 1903 [1] 1022).  
 4) 3-Diäthylamido-4, 5-Diketo-3-Methyl-1-Phenyl-4, 5-Dihydro-pyrazol. Sm. 66,5–67°. Pikrat (*B.* 36, 1452 *C.* 1903 [1] 1361).
- $C_{14}H_{19}O_3N$  \*18) 4-Methylphenylmonamid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 176–177° (*Bl.* [3] 29, 1019 *C.* 1903 [2] 1315).  
 32) 4-Methylphenylmonamid d. cis- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 117–118° (*C. r.* 136, 243 *C.* 1903 [1] 565).  
 $C_{14}H_{19}O_3N_5$  C 55,1 — H 6,2 — O 15,7 — N 23,0 — M. G. 305.  
 1) Isopropylidenhydrazid d.  $\beta$ -Phenylureidoacetylamidoessigsäure. Sm. 234° u. Zers. (*J. pr.* [2] 70, 256 *C.* 1904 [2] 1464).
- $C_{14}H_{19}O_4N$  16) Diäthylester d. 2-Methylphenylamidomalonsäure. Fl. HCl (*Am.* 30, 135 *C.* 1903 [2] 720).  
 17) Diäthylester d. 3-Methylphenylamidomalonsäure. Sm. 50,5–51° (*Am.* 30, 138 *C.* 1903 [2] 721).
- $C_{14}H_{19}O_4N_3$  2) Methyllester d.  $\beta$ -Benzoylamidoacetylamidopropylamidoameisensäure. Sm. 151° (*J. pr.* [2] 70, 214 *C.* 1904 [2] 1460).  
 3) Äthylester d.  $\alpha$ -Benzoylamidoacetylamidoäthylamidoameisensäure. Sm. 205° (*J. pr.* [2] 70, 120 *C.* 1904 [2] 1037).
- $C_{14}H_{19}O_4N_5$  C 52,3 — H 5,9 — O 19,9 — N 21,8 — M. G. 321.  
 1) 8-Dipropionylamido-2,6-Diketo-1,3,7-Trimethylpurin. Sm. 140° (*D.R.P.* 139960 *C.* 1903 [1] 859).
- $C_{14}H_{19}O_5N_5$  C 49,8 — H 5,6 — O 23,7 — N 20,8 — M. G. 337.  
 1) Semicarbazon d. Glyazindihydrotetramethylidimalonsäuremethyllester- $\epsilon$ -Lakton. Sm. 230° (*Soc.* 83, 1258 *C.* 1903 [2] 1423).
- $C_{14}H_{20}O_2N_2$  \*2) 2, 5-Di[Acetylamido]-4-Isopropyl-1-Methylbenzol. Sm. 260° (*A.* 336, 22 *C.* 1904 [2] 1467).  
 10) s-Caproyl-2-Methylphenylharnstoff. Sm. 99–100° (*Soc.* 85, 810 *C.* 1904 [2] 201, 520).  
 11) s-Caproyl-4-Methylphenylharnstoff. Sm. 131–132° (*Soc.* 85, 810 *C.* 1904 [2] 201, 520).  
 12) 2-Acetylamido-1-Oxy- $p$ -Piperidylmethylbenzol. Sm. 82° (*D.R.P.* 92309). — \*IV, 15.  
 13) 4-Acetylamido-1-Oxy- $p$ -Piperidylmethylbenzol. Sm. 159° (*D.R.P.* 92309). — \*IV, 15.
- $C_{14}H_{20}O_4N_2$  16) Diäthylester d. 1,3-Phenylendi[Methylamidoameisensäure]. Sm. 160° (*B.* 36, 1682 *C.* 1903 [2] 30).  
 17) Diacetat d.  $\beta$ - $\delta$ -Campherdioxim. Sm. 119° (*Soc.* 85, 910 *C.* 1904 [2] 598).
- $C_{14}H_{20}O_4N_8$  C 46,1 — H 5,5 — O 17,6 — N 30,8 — M. G. 364.  
 1) Diacetylporphyrindin. Sm. 170° u. Zers. (*B.* 36, 1302 *C.* 1903 [1] 1256).
- $C_{14}H_{20}O_6N_2$  \*1) Diäthylester d.  $\delta\epsilon$ -Diimido- $\beta\eta$ -Diketooktan- $\gamma\zeta$ -Dicarbonsäure (*D. d.* Dicyandiacetessigsäure). Sm. 132° (*A.* 332, 138 *C.* 1904 [2] 190).  
 2) Diäthylester d. isom. Dicyandiacetessigsäure. Sm. 132,5° (*A.* 332, 139 *C.* 1904 [2] 190).  
 3) Diäthylester d.  $\beta\gamma$ -Diimido- $\delta$ -Acetyl- $\epsilon$ -Ketohehexan- $\alpha\alpha$ -Dicarbonsäure. Sm. 141–142° (*A.* 332, 148 *C.* 1904 [2] 191).  
 $C_{14}H_{20}O_7N_4$  C 47,2 — H 5,6 — O 31,5 — N 15,7 — M. G. 356.  
 1) Diäthylester d. Acetylbisdiazoacetessigsäure. Sm. 140° (*G.* 34 [1] 192 *C.* 1904 [1] 1333).
- $C_{14}H_{20}O_8N_2$  \*1) Dimethylester d. Glyoximperoxyddihydrotetramethylidimalonsäure. Sm. 154° (*Soc.* 83, 1260 *C.* 1903 [2] 1423).  
 \*2) Dimethylester d.  $\delta\epsilon$ -Dioximido- $\gamma\zeta$ -Diketo- $\beta\eta$ -Dimethyloktan- $\beta\eta$ -Dicarbonsäure. Sm. 177° (*Soc.* 83, 1261 *C.* 1903 [2] 1423).
- $C_{14}H_{20}NCl$  1) Chlorallylat d. 1-Äthyl-1, 2, 3, 4-Tetrahydrochinolin. 2 + PtCl<sub>4</sub> (*B.* 35, 3909 *C.* 1903 [1] 36).

- $C_{14}H_{20}NJ$  3) Methyläthylallyl-4-Methylphenylammoniumjodid (*Ph. Ch.* 45, 239 *C.* 1903 [2] 979).
- 4) Jodallylat d. 1-Aethyl-1, 2, 3, 4-Tetrahydrochinolin. Zers. bei 119–120° (*B.* 35, 3909 *C.* 1903 [1] 36).
- $C_{14}H_{20}N_2S$  5) d-sec. Butylamid d. 1, 2, 3, 4-Tetrahydrochinolin-1-Thiocarbonsäure. Sm. 40° (*Ar.* 242, 62 *C.* 1904 [1] 998).
- 6) d-sec. Butylamid d. 1, 2, 3, 4-Tetrahydroisochinolin-2-Thiocarbonsäure. Sm. 117° (*Ar.* 242, 62 *C.* 1904 [1] 998).
- $C_{14}H_{20}N_3J$  1) Jodmethylat d. 3-Methylimido-1, 4, 5-Trimethyl-2-Phenyl-2, 3-Dihydropyrazol. Sm. 130° (*B.* 36, 3289 *C.* 1903 [2] 1191).
- $C_{14}H_{21}ON$  22) O-Propyleycampher (*C. r.* 136, 789 *C.* 1903 [1] 1085).
- 23) Cyanpropylcampher. Sm. 46°; Sd. 140–150°<sub>20</sub> (*B.* 24 [2] 733). — III, 513.
- 24) 3, 4, 4, 6-Tetramethyl-2-Phenyltetrahydro-1, 3-Oxazin. Sd. 267 bis 270°<sub>747</sub>. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*M.* 25, 863 *C.* 1904 [2] 1241).
- $C_{14}H_{21}O_2N$  \* 19) Aethyläther d. 6-Acetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 135° (*B.* 36, 2891 *C.* 1903 [2] 875).
- 22) 4-Oximido-1-Keto-2, 5-Dipseudobutyl-1, 4-Dihydrobenzol. Sm. 209° (*Bl.* [3] 31, 971 *C.* 1904 [2] 1113).
- 23) 2-Methylphenylester d. Dipropylamidoameisensäure. Sd. 180°<sub>19</sub> (*Bl.* [3] 31, 20 *C.* 1904 [1] 508).
- 24) 4-Methylphenylester d. Dipropylamidoameisensäure. Sd. 185°<sub>18</sub> (*Bl.* [3] 31, 21 *C.* 1904 [1] 508).
- 25) Benzoat d. α-Dimethylamido-β-Oxy-β-Methylbutan. HCl (*C. r.* 138, 767 *C.* 1904 [1] 1196).
- $C_{14}H_{21}O_3N$  \* 5) 4-Diäthylamidoacetat d. 3, 4-Dioxy-1-Methylbenzol-3-Methyläther. Fl. HCl, (2HCl, PtCl<sub>4</sub>), HJ (*Ar.* 240, 639 *C.* 1903 [1] 24).
- 9) 2-Methoxyphenylester d. Dipropylamidoameisensäure. Sd. 196°<sub>18</sub> (*Bl.* [3] 31, 21 *C.* 1904 [1] 508).
- $C_{14}H_{21}O_3N_3$  C 60,2 — H 7,5 — O 17,2 — N 15,1 — M. G. 279.
- 1) α-[β-Phenylhydrazido]-α-Diäthylamidoäthan-α-Ketocarbonsäure. (4 + 3HCl, AuCl<sub>3</sub>) (*B.* 36, 1455 *C.* 1903 [1] 1361).
- $C_{14}H_{21}O_4N$  \* 4) Diäthylester d. Dihydrocollidindicarbonsäure. Sm. 131° (*A.* 332, 19 *C.* 1904 [1] 1565).
- $C_{14}H_{21}O_5N$  4) 2, 5-Dimethyläther-3-Propyläther d. 4-Nitro-2, 3, 5-Trioxyl-1-Propylbenzol. Sm. 68° (*B.* 36, 1720 *C.* 1903 [2] 114).
- $C_{14}H_{22}O_3S$  6) α-Oxyheptyl-4-Methylphenylsulfon (*Am.* 31, 166 *C.* 1904 [1] 875).
- 7) 2-Isoamyl-1, 3, 5-Trimethylbenzol-4-Sulfonsäure. Fl. (*B.* 37, 1720 *C.* 1904 [1] 1489).
- $C_{14}H_{22}O_4N_6$  C 49,7 — H 6,5 — O 18,9 — N 24,9 — M. G. 338.
- 1) 2, 4, 2', 4'-Tetraketo-5, 5, 5', 5'-Tetramethyl-3, 3'-Diäthylloktahydro-1, 1'-Azoimidazol. Sm. 234° u. Zers. (*C.* 1904 [2] 1029).
- $C_{14}H_{22}O_4S_2$  1) 1, 3-Di[Butylsulfon]benzol. Fl. (*J. pr.* [2] 68, 321 *C.* 1903 [2] 1170).
- $C_{14}H_{22}O_5N_2$  C 56,4 — H 7,4 — O 20,8 — N 9,4 — M. G. 298.
- 1) Aethylester d. 6-Keto-2, 4-Dioxy-5-Cyan-2-Methyl-5-Aethylhexahydropyridin-4-Aethyläther-3-Carbonsäure. Sm. 198° (*G.* 33 [2] 167 *C.* 1903 [2] 1283).
- $C_{14}H_{22}O_5Hg_2$  1) Verbindung (aus Camphen). Sm. 188–189° (*B.* 36, 3576 *C.* 1903 [2] 1362).
- $C_{14}H_{22}O_5S_2$  1) Tetraäthylester d. Dimethyldisulfid-ααββ-Tetracarbonsäure. Sm. 131° (*B.* 36, 3725 *C.* 1903 [2] 1416).
- $C_{14}H_{22}O_{11}Hg_4$  1) Verbindung (aus Aceton u. Mercuriacetat). Sm. 157° (*B.* 36, 3703 *C.* 1903 [2] 1239).
- $C_{14}H_{23}ON_3$  \* 4) Semicarbazon d. α-Jonon. + NaHSO<sub>3</sub> (*C.* 1904 [1] 280).
- \* 5) Semicarbazon d. β-Jonon. NaHSO<sub>3</sub> + 4H<sub>2</sub>O (*C.* 1904 [1] 281).
- 9) Semicarbazon d. Allylcampher. Sm. 180° (*C. r.* 136, 792 *C.* 1903 [1] 1086).
- 10) Semicarbazon d. Camphenilidenaceton. Sm. 178–179° (*D.R.P.* 138211 *C.* 1903 [1] 269).
- $C_{14}H_{23}O_5N$  2) Diäthylester d. β-Amido-γ-Acetyl-δ-Methyl-β-Penten-ss-Dicarbonsäure. Sm. 75° (*B.* 36, 2190 *C.* 1903 [2] 569).
- $C_{14}H_{23}N_3S$  2) Thiosemicarbazon d. Iron. Sm. 181° (*C.* 1904 [1] 281).
- 3) Thiosemicarbazon d. α-Jonon. Sm. 121° (*C.* 1904 [1] 281).
- 4) Thiosemicarbazon d. β-Jonon. Sm. 158° (*C.* 1904 [1] 281).

- $C_{14}H_{24}O_3N_2$  2) 2,4,6-Triketo-5,5-Diisoamylhexahydro-1,3-Diazin. Sm. 172° (D.R.P. 146496 *C.* 1903 [2] 1484; *A.* 335, 347 *C.* 1904 [2] 1381).
- $C_{14}H_{24}O_4N_2$  3) Azin d. Methylacetessigsäureäthylester. Fl. (*B.* 37, 2831 *C.* 1904 [2] 642).
- 4) Piperidid d. d-Weinsäure. Sm. 189—190° (*Soc.* 83, 1348 *C.* 1904 [1] 83).
- $C_{14}H_{25}O_3N$  \*2) Mentylester d.  $\beta$ -Amidopropen- $\alpha$ -Carbonsäure. Sm. 88—89° (*Soc.* 81, 1505 *C.* 1903 [1] 138).
- $C_{14}H_{25}O_2N_3$  C 62,9 — H 9,4 — O 12,0 — N 15,7 — M. G. 267.
- 1) Semicarbazon d. Pseudojononhydrat. Sm. 144° (D.R.P. 143724 *C.* 1903 [2] 474).
- $C_{14}H_{25}O_3N_3$  C 59,4 — H 8,8 — O 17,0 — N 14,8 — M. G. 283.
- 1) r-Rhodinolester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 112° (*C. r.* 138, 1701 *C.* 1904 [2] 440).
- $C_{14}H_{26}ON_2$  \*3) Pulegennitrolpiperidid. Sm. 106—107° (*A.* 327, 132 *C.* 1903 [1] 1412).
- $C_{14}H_{26}O_3N_2$  \*1) Methylester d.  $\alpha\alpha$ -Dipiperidylxyessigmethyläthersäure. Sd. 106 bis 109° (*Soc.* 85, 987 *C.* 1904 [2] 830).
- $C_{14}H_{27}O_2N$  4) Propylester d. l-Menthylamidoameisensäure. Sm. 57° (*Soc.* 85, 690 *C.* 1904 [2] 332).
- $C_{14}H_{27}O_2Cl$  1)  $\beta$ -Chloräthylester d. Laurinsäure. Sm. 24°; Sd. 100° (*B.* 36, 4341 *C.* 1904 [1] 433).
- $C_{14}H_{27}O_2Br$  3)  $\beta$ -Bromäthylester d. Laurinsäure. Sm. 36°; Sd. 124° (*B.* 36, 4341 *C.* 1904 [1] 433).
- $C_{14}H_{27}O_3N_3$  2)  $\beta$ -Dimethylloktylester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 124° (*C. r.* 138, 985 *C.* 1904 [1] 1398).
- 3) Caprylat d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 104—105° (*C. r.* 138, 1275 *C.* 1904 [2] 93).
- $C_{14}H_{28}OS$  2) Thiolmyristinsäure. Sm. 25°. Na (*C. r.* 136, 555 *C.* 1903 [1] 816).
- $C_{14}H_{28}O_4N_2$  2) Di[ $\alpha$ -Oxymethyl- $\gamma$ -Methylbutylamid] d. Oxalsäure. Sm. 99—100° (*C.* 1902 [1] 400).
- $C_{14}H_{28}O_{12}N_2$  \*1) Oxamid d. Glukamin +  $1\frac{1}{2}H_2O$ . Sm. 178° (*C.* 1904 [1] 431).
- 2) isom. Di[ $\alpha$ -Oxymethyl- $\gamma$ -Methylbutylamid] d. Oxalsäure (Oxamid d. Mannamin). Sm. 138° (*C.* 1904 [1] 872).
- $C_{14}H_{29}ON$  3)  $\gamma$ -Oximidotetradekan. Sm. 40° (*Bl.* [3] 29, 1210 *C.* 1904 [1] 355).
- $C_{14}H_{29}ON_3$  C 65,9 — H 11,4 — O 6,3 — N 16,4 — M. G. 255.
- 1)  $\beta$ -Semicarbazontridekan. Sm. 123° (*Bl.* [3] 29, 1130 *C.* 1904 [1] 258).
- $C_{14}H_{29}O_5N$  C 64,9 — H 11,2 — O 18,5 — N 5,4 — M. G. 259.
- 1) Nitrat d.  $\alpha$ -Oxytetradekan. Sd. 175—180° (*C. r.* 136, 1563 *C.* 1903 [2] 338).
- $C_{14}H_{30}O_6S_8$  1)  $\beta$ -Triäthylsulfon- $\beta$ -Methylheptan (*B.* 37, 508 *C.* 1904 [1] 883).

## — 14 IV —

- $C_{14}H_4O_6N_2Cl_2$  1) 4,8-Dichlor-1,5-Dinitro-9,10-Anthrachinon (D.R.P. 137782 *C.* 1903 [1] 108).
- 2) 4,5-Dichlor-1,8-Dinitro-9,10-Anthrachinon (D.R.P. 137782 *C.* 1903 [1] 108).
- $C_{14}H_4O_6N_2Br_2$  2) 4,8-Dibrom-1,5-Dinitro-9,10-Anthrachinon (D.R.P. 137782 *C.* 1903 [1] 108).
- $C_{14}H_4O_{10}N_2Br_2$  1) p-Dibromdinitro-1,3,5,7-Tetraoxy-9,10-Anthrachinon (D.R.P. 97287 *C.* 1898 [2] 689). — \*III, 313.
- $C_{14}H_6O_2N_2Br_4$  2) p-Tetrabrom-1,4-Diamido-9,10-Anthrachinon. Sm. noch nicht bei 300° (D.R.P. 137783 *C.* 1903 [1] 112).
- 3) 2,4,6,8-Tetrabrom-1,5-Diamido-9,10-Anthrachinon (D.R.P. 148109 *C.* 1904 [1] 230; *B.* 37, 4183 *C.* 1904 [2] 1741).
- $C_{14}H_5O_4NCl$  1) 4-Chlor-1-Nitro-9,10-Anthrachinon (D.R.P. 137782 *C.* 1903 [1] 108).
- $C_{14}H_5O_4NBr$  2) 4-Brom-1-Nitro-9,10-Anthrachinon (D.R.P. 137782 *C.* 1903 [1] 108).
- $C_{14}H_5O_4N_2Br_2$  1) 2,4-Dibrom-5-Nitro-1-Amido-9,10-Anthrachinon (D.R.P. 151512 *C.* 1904 [1] 1677).
- $C_{14}H_5O_5NBr$  1) 2-Brom-4-Nitro-1-Oxy-9,10-Anthrachinon (D.R.P. 127439 *C.* 1902 [1] 1032). — \*III, 300.

- $C_{14}H_6O_8N_2Cl_2$  1) Chlorid d. 4,4'-Dinitrobiphenyl-2,2'-Dicarbonsäure. Sm. 138° (B. 36, 3744 C. 1904 [1] 37).
- $C_{14}H_6O_8N_4Br_2$  1) 2,6-Dibrom-4,8-Dinitro-1,5-Diamido-9,10-Anthrachinon. Sm. oberh. 360° (D.R.P. 148109 C. 1904 [1] 230).
- $C_{14}H_6O_{11}N_2S$  1) 4,8-Diamido-1,5-Dioxy-9,10-Anthrachinon-*p*-Sulfonsäure (D.R.P. 152013 C. 1904 [2] 378).
- $C_{14}H_6O_{19}Cl_2S_2$  1) 4,8-Dichlor-1,3,5,7-Tetraoxy-9,10-Anthrachinon-2,6-Disulfonsäure (D.R.P. 99078 C. 1898 [2] 1152). — \*III, 313.
- $C_{14}H_6O_{14}N_2S_2$  3) 4,5-Dinitro-1,8-Dioxy-9,10-Anthrachinon-*p*-Disulfonsäure (D.R.P. 100136, 101805, 115858, 119228, 119229). — \*III, 308.
- $C_{14}H_7ONBr_2$  4) *p*-Dinitro-2,7-Dioxy-9,10-Anthrachinon-*p*-Disulfonsäure (D.R.P. 99612 C. 1899 [1] 400). — \*III, 309.
- $C_{14}H_7ONS_2$  1) 2,7-Dibrom-9-Imido-10-Keto-9,10-Dihydrophenanthren. Sm. 231 bis 232° u. Zers. (B. 37, 3570 C. 1904 [2] 1403).
- $C_{14}H_7ON_2Cl$  1) Indophtenin (B. 37, 3350 C. 1904 [2] 1058).
- $C_{14}H_7O_2NCl_2$  1) Chloreumaropphenazin. Sm. 149—150° (B. 35, 4335 C. 1903 [1] 293).
- $C_{14}H_7O_2NBr_2$  3) Phenylimid d. 3,5-Dichlorbenzol-1,2-Dicarbonsäure. Sm. 150 bis 150,5° (Soc. 81, 1537 C. 1903 [1] 140).
- $C_{14}H_7O_2N_2Cl$  3) 2,4-Dibrom-1-Amido-9,10-Anthrachinon. Sm. 221° (C. 1904 [2] 340).
- $C_{14}H_7O_2N_2Br_3$  4) 2,7-Dibrom-9-Oximido-10-Keto-9,10-Dihydrophenanthren. Sm. 229—230° u. Zers. (B. 37, 3570 C. 1904 [2] 1403).
- $C_{14}H_7O_2N_6Cl_6$  1) 9,10-Anthrachinon-2-Diazoniumchlorid (B. 37, 62 C. 1904 [1] 520).
- $C_{14}H_7O_2N_5Br_3$  1) 9,10-Anthrachinon-2-Diazoniumtribromid (B. 37, 62 C. 1904 [1] 520).
- $C_{14}H_7O_2N_5Br_3$  1)  $\alpha\alpha$ -Di[2,4,6-Trichlorphenylazo]- $\alpha$ -Nitroäthan. Sm. 97,5° u. Zers. (B. 36, 3834 C. 1904 [1] 19).
- $C_{14}H_7O_2N_5Br_3$  1)  $\alpha\alpha$ -Di[2,4,6-Tribromphenylazo]- $\alpha$ -Nitroäthan. Sm. 98° u. Zers. (B. 36, 3835 C. 1904 [1] 19).
- $C_{14}H_7O_5BrS$  1) 2-Brom-9,10-Phenanthrenchinon-*p*-Sulfonsäure (B. 37, 3564 C. 1904 [2] 1402).
- $C_{14}H_7O_7NS$  3) 1-Nitro-9,10-Anthrachinon-5-Sulfonsäure (B. 37, 71 C. 1904 [1] 666).
- $C_{14}H_7O_8BrS_2$  4) 1-Nitro-9,10-Anthrachinon-8-Sulfonsäure (B. 37, 71 C. 1904 [1] 666).
- $C_{14}H_7O_8BrS_2$  1) 2-Brom-9,10-Phenanthrenchinon-*p*-Disulfonsäure (B. 37, 3565 C. 1904 [2] 1402).
- $C_{14}H_8ONBr$  1) 2[oder 7]-Brom-10-Imido-9-Keto-9,10-Dihydrophenanthren. Sm. 169° u. Zers. (B. 37, 3561 C. 1904 [2] 1401).
- $C_{14}H_8ON_2Cl_2$  4) 2,5-Di[3-Chlorphenyl]-1,3,4-Oxdiazol. Sm. 144°. + AgNO<sub>3</sub> (J. pr. [2] 69, 382 C. 1904 [2] 535).
- $C_{14}H_8ON_2Br_2$  1) 2,5-Di[2-Bromphenyl]-1,3,4-Oxdiazol. Sm. 108°; Sd. 240—250°<sub>13</sub> (J. pr. [2] 69, 476 C. 1904 [2] 536).
- $C_{14}H_8ON_2Br_2$  2) 2,5-Di[3-Bromphenyl]-1,3,4-Oxdiazol. Sm. 179° (J. pr. [2] 69, 478 C. 1904 [2] 536).
- $C_{14}H_8ON_2Br_2$  3) 2,5-Di[4-Bromphenyl]-1,3,4-Oxdiazol. Sm. 249° (J. pr. [2] 69, 480 C. 1904 [2] 536).
- $C_{14}H_8O_2NCl$  3) 3-Chlor-2-Amido-9,10-Anthrachinon. Sm. 280—283° (D.R.P. 148110 C. 1904 [1] 329).
- $C_{14}H_8O_2NCl$  4) *p*-Chlor-2-Amido-9,10-Anthrachinon (D.R.P. 138134 C. 1903 [1] 209).
- $C_{14}H_8O_2NBr$  \*1) 9-Brom-10-Nitrophenanthren. Sm. 206—207° (B. 37, 3573 C. 1904 [2] 1403).
- $C_{14}H_8O_2NBr$  3) 3-Brom-2-Amido-9,10-Anthrachinon. Sm. 267—270° (D.R.P. 148110 C. 1904 [1] 329).
- $C_{14}H_8O_2NBr$  4) *p*-Brom-2-Amido-9,10-Anthrachinon (D.R.P. 138134 C. 1903 [1] 209).
- $C_{14}H_8O_2NBr$  5) 2[oder 7]-Brom-9-Oximido-10-Keto-9,10-Dihydrophenanthren. Sm. 163—164° (B. 37, 3560 C. 1904 [2] 1401).
- $C_{14}H_8O_2NBr$  6) 3[oder 6]-Brom-9-Oximido-10-Keto-9,10-Dihydrophenanthren. Sm. 193° (B. 37, 3572 C. 1904 [2] 1403).
- $C_{14}H_8O_2NBr$  7) Bromisopyrophthalon. Sm. 153° (B. 36, 1661 C. 1903 [2] 40).

- $C_{14}H_9O_2N_2Br_2$  \*2) 2,6-Dibrom-1,5-Diamido-9,10-Anthrachinon. Sm. 274° (*B.* 37, 4181 *C.* 1904 [2] 1741).
- $C_{14}H_9O_2Cl_4Br_2$  1)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 248° u. Zers. (*A.* 325, 53 *C.* 1903 [1] 462).
- $C_{14}H_9O_2NBr$  2) 10-Brom-10-Nitro-9-Keto-9,10-Dihydroanthracen. Zers. bei 116° (*A.* 330 181 *C.* 1904 [1] 891).
- $C_{14}H_9O_2N_5Cl$  1) Verbindung (aus 1,5-Bisdiazo-9,10-Anthrachinon) (*B.* 35, 3926 *C.* 1903 [1] 88).
- $C_{14}H_9O_4N_2Cl_2$  \*2) trans- $\alpha\beta$ -Di[2-Chlor-4-Nitrophenyl]äthen. Sm. 302° (*Soc.* 85, 1437 *C.* 1904 [2] 1740).
- 3) cis- $\alpha\beta$ -Di[2-Chlor-4-Nitrophenyl]äthen. Sm. 172–173° (*Soc.* 85, 1437 *C.* 1904 [2] 1740).
- $C_{14}H_9O_5NCl$  1) 2-[4-Chlor-3-Nitrobenzoyl]benzol-1-Carbonsäure. Sm. 202–204° (*D.R.P.* 148110 *C.* 1904 [1] 329).
- $C_{14}H_9O_5N_3Cl_3$  1) Acetat d. 2,3,5-oder-2,3,6-Trichlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 153° (*B.* 36, 3269 *C.* 1903 [2] 1126).
- $C_{14}H_9O_5N_4Cl_2$  1) Acetat d. 3,5-Dichlor-2,2',4'-Trinitro-4-Oxydiphenylamin. Sm. 177,5° (*B.* 37, 1730 *C.* 1904 [1] 1521).
- 2) Acetat d. 3,5-Dichlor-2',4',6'-Trinitro-4-Oxydiphenylamin. Sm. 259° (*B.* 37, 1730 *C.* 1904 [1] 1521).
- $C_{14}H_9N_2Cl_2S$  1) 2,5-Di[3-Chlorphenyl]-1,3,4-Thiodiazol. Sm. 151° (*J. pr.* [2] 69, 383 *C.* 1904 [2] 536).
- $C_{14}H_9N_2Br_2S$  1) 2,5-Di[2-Bromphenyl]-1,3,4-Thiodiazol. Sm. 117° (*J. pr.* [2] 69, 477 *C.* 1904 [2] 536).
- 2) 2,5-Di[3-Bromphenyl]-1,3,4-Thiodiazol. Sm. 175° (*J. pr.* [2] 69, 478 *C.* 1904 [2] 536).
- 3) 2,5-Di[4-Bromphenyl]-1,3,4-Thiodiazol. Sm. 237° (*J. pr.* [2] 69, 480 *C.* 1904 [2] 536).
- $C_{14}H_9O_2NBr_2$  1) 9,10-Dibrom-9-Nitro-9,10-Dihydrophenanthren. Sm. 81–82° (*B.* 37, 3576 *C.* 1904 [2] 1404).
- $C_{14}H_9O_2N_2Cl$  1) 6-oder-7-Chlor-3-Oxy-2-[2-Oxyphenyl]-1,4-Benzdiazin. Sm. 286–287° (*B.* 35, 4334 *C.* 1903 [1] 293).
- $C_{14}H_9O_6NS$  5) 1-Amido-9,10-Anthrachinon-5-Sulfonsäure (*B.* 37, 71 *C.* 1904 [1] 666).
- 6) 1-Amido-9,10-Anthrachinon-7-Sulfonsäure (*D.R.P.* 105634 *C.* 1900 [1] 381; *B.* 37, 69 Anm. *C.* 1904 [1] 666).
- 7) 1-Amido-9,10-Anthrachinon-8-Sulfonsäure (*B.* 37, 71 *C.* 1904 [1] 666).
- $C_{14}H_9O_6NS$  6) isom. 2-Amidooxy-9,10-Anthrachinonsulfonsäure (*D.R.P.* 105634 *C.* 1900 [1] 381). — \*III, 301.
- 7) 4-Amido-1-Oxy-9,10-Anthrachinon-7-Sulfonsäure (*D.R.P.* 101919; *D.R.P.* 155440 *C.* 1904 [2] 1356).
- $C_{14}H_9O_6N_2Cl_2$  1) Acetylderivat d. 3,5-Dichlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 207–208° (*B.* 36, 3264 *C.* 1903 [2] 1126).
- $C_{14}H_9O_6N_4Cl$  1) Acetat d. 5-Chlor-2,2',4'-Trinitro-4-Oxydiphenylamin. Sm. 177,5–178° (*B.* 37, 1728 *C.* 1904 [1] 1520).
- 2) Acetat d. 5-Chlor-3,2',4'-Trinitro-4-Oxydiphenylamin. Sm. 188,5° (*B.* 37, 1729 *C.* 1904 [1] 1521).
- 3) Acetat d. 3-Chlor-2',4',6'-Trinitro-4-Oxydiphenylamin. Sm. 173° (*B.* 37, 1728 *C.* 1904 [1] 1520).
- 4) Acetat d. 2-Chlor-2',4',6'-Trinitro-4-Oxydiphenylamin. Sm. 134,5° (*B.* 37, 1729 *C.* 1904 [1] 1521).
- $C_{14}H_{10}ON_2S$  \*3) 2-Thiocarbonyl-4-Keto-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. oberh. 300° (*Bl.* [3] 31, 882 *C.* 1904 [2] 672).
- 6) 1-Benzoylamidobenzthiazol. Sm. 186° (*A.* 212, 330; *B.* 36, 3136 *C.* 1903 [2] 1071). — IV, 682.
- 7) Phenylamid d. Benzthiazol-1-Carbonsäure. Sm. 160° (*B.* 37, 3729 *C.* 1904 [2] 1450).
- $C_{14}H_{10}ON_3Cl$  2) 6-oder-7-Chlor-3-Oxy-2-[2-Amidophenyl]-1,4-Benzdiazin. Sm. 264° (*B.* 35, 4332 *C.* 1903 [1] 292).
- 3) isom. 6-oder-7-Chlor-3-Oxy-2-[2-Amidophenyl]-1,4-Benzdiazin. Sm. 239–240° (*B.* 35, 4333 *C.* 1903 [1] 292).
- $C_{14}H_{10}ON_3Br$  2) 3-Oxy-2-[3-Brom-2-Amidophenyl]-1,4-Benzdiazin. Sm. 249–250° (*B.* 35, 4333 *C.* 1903 [1] 292).

- $C_{14}H_{10}O_2NCl$  \*3) Chlorimid d. Benzolcarbonsäure. Sm.  $86^\circ$  ( $89^\circ$ ) (*Am.* 30, 420 *C.* 1904 [1] 241; *C.* 1904 [1] 803).
- 4) Methyläther d. Verb.  $C_{13}H_8O_2NCl$ . Sm.  $144^\circ$  (*Bl.* [3] 31, 532 *C.* 1904 [1] 1598).
- 5) Verbindung (aus  $\alpha$ -Pikolin u. Phtalylchlorid).  $HCl$  (*B.* 36, 1658 *C.* 1903 [2] 40).
- $C_{14}H_{10}O_2N_2Br_2$  \*2)  $\alpha\beta$ -Di[3-Brombenzoyl]hydrazin. Sm.  $265^\circ$  (*J. pr.* [2] 69, 477 *C.* 1904 [2] 536).
- \*5)  $\alpha\beta$ -Di[4-Brombenzoyl]hydrazin. Sm.  $300^\circ$  u. Zers. (*J. pr.* [2] 69, 479 *C.* 1904 [2] 536).
- 6)  $\alpha\beta$ -Di[2-Brombenzoyl]hydrazin. Sm.  $245^\circ$  (*J. pr.* [2] 69, 475 *C.* 1904 [2] 536).
- $C_{14}H_{10}O_2N_4Br_2$  1) 2,6-Dibrom-1,4,5,8-Tetraamido-9,10-Anthrachinon (D.R.P. 148109 *C.* 1904 [1] 230).
- $C_{14}H_{10}O_3NCl$  7) 2-[4-Chlor-3-Amidobenzoyl]benzol-1-Carbonsäure. Sm. 175 bis  $176^\circ$  (D.R.P. 148110 *C.* 1904 [1] 329).
- $C_{14}H_{10}O_3N_2Br_4$  \*1) Dimethyläther d. 3,5,3',5'-Tetrabrom-4,4'-Dioxyazoxybenzol. Sm.  $214^\circ$  (*Am.* 30, 61 *C.* 1903 [2] 354).
- 2) trans- $\beta\beta\gamma\gamma$ -Tetrabrom- $\alpha$ -Keto- $\gamma$ -[2-Nitrophenyl]- $\alpha$ -[2-Pyridyl]-propan. Sm.  $120^\circ$  (*B.* 35, 4066 *C.* 1903 [1] 92).
- $C_{14}H_{10}O_3N_2S_3$  1) 4-Sulfofenylamid d. Benzthiazol-1-Thiocarbonsäure. Na (*B.* 37, 3728 *C.* 1904 [2] 1450).
- $C_{14}H_{10}O_4NCl$  1) Phenylester d. 4-Chlorformoxyphenylamidameisensäure. Sm.  $143-144^\circ$  (*J. pr.* [2] 67, 340 *C.* 1903 [1] 1339).
- $C_{14}H_{10}O_4N_2S_2$  1) 4-Sulfofenylamid d. Benzthiazol-1-Carbonsäure. Na (*B.* 37, 3730 *C.* 1904 [2] 1450).
- $C_{14}H_{10}O_6N_2Br_2$  1) Dimethylester d. 3,3'-Dibrom-2,2'-Diketo-1,2,1',2'-Tetrahydro-1,1'-Bipyridyl-5,5'-Dicarbonsäure. Sm.  $344^\circ$  (*B.* 37, 3840 *C.* 1904 [2] 1616).
- $C_{14}H_{10}O_6N_2S_2$  1) 4,8-Diimido-1,5-Diketo-1,4,5,8-Tetrahydro-9,10-Anthrachinon-2,6-Disulfonsäure (D.R.P. 113724 *C.* 1900 [2] 831). — \*III, 307.
- 2) 4,4'-Azo- $\alpha\beta$ -Diphenyläthen-2,2'-Disulfonsäure (*C.* 1903 [1] 1414).
- $C_{14}H_{10}O_6N_3Cl$  1) Acetat d. 2-Chlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm.  $170^\circ$  (*B.* 36, 3266 *C.* 1903 [2] 1126).
- 2) Acetat d. 3-Chlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm.  $156^\circ$  (*B.* 36, 3267 *C.* 1903 [2] 1126).
- $C_{14}H_{10}O_6N_3Br$  1) Acetat d. 2-Brom-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 165 bis  $166^\circ$  (*B.* 36, 3269 *C.* 1903 [2] 1126).
- $C_{14}H_{10}O_7N_2S$  2) 2,4-Dinitro- $\alpha\beta$ -Diphenyläthen-P-Sulfonsäure. Sm.  $70^\circ$ ; Zers. bei  $112-120^\circ$ . Na (*B.* 35, 4146 *C.* 1903 [1] 165).
- 3) 4,5-Diamido-1,8-Dioxy-9,10-Anthrachinon-2-Sulfonsäure (D.R.P. 117893 *C.* 1901 [1] 550; D.R.P. 119228 *C.* 1901 [1] 807). — \*III, 308.
- $C_{14}H_{10}O_7N_2S_2$  \*1) 4,4'-Azoxy- $\alpha\beta$ -Diphenyläthen-2,2'-Disulfonsäure (*C.* 1903 [1] 1414).
- $C_{14}H_{10}O_{10}N_2S_2$  \*1)  $\alpha\beta$ -Di[4-Nitrophenyl]äthen-2,2'-Disulfonsäure (*Soc.* 85, 1427 *C.* 1904 [2] 1739).
- 4) 2,4-Dinitro- $\alpha\beta$ -Diphenyläthen-P-Disulfonsäure. Sm.  $83-85^\circ$  ( $125^\circ$ ). Ba +  $4H_2O$ , Benzidinsalz (*B.* 35, 4147 *C.* 1903 [1] 165).
- 5) P-Diamido-2,6-Dioxy-9,10-Anthrachinon-P-Disulfonsäure.  $K_2$  (D.R.P. 99611 *C.* 1899 [1] 399). — \*III, 309.
- 6) P-Diamido-2,7-Dioxy-9,10-Anthrachinon-P-Disulfonsäure.  $K_2$  (D.R.P. 99612). — \*III, 309.
- $C_{14}H_{10}O_{10}N_4S$  1) Dimethyläther d. 4,6,4',6'-Tetranitro-2,2'-Dioxydiphenylsulfid. Sm.  $270^\circ$  (*R.* 23, 114 *C.* 1904 [2] 205).
- 2) Dimethyläther d. 4,6,4',6'-Tetranitro-3,3'-Dioxydiphenylsulfid. Sm.  $204^\circ$  (*R.* 23, 122 *C.* 1904 [2] 206).
- $C_{14}H_{10}O_{10}N_4S_2$  1) Dimethyläther d. 4,6,4',6'-Tetranitro-3,3'-Dioxydiphenylsulfid. Sm.  $236^\circ$  u. Zers. (*R.* 23, 123 *C.* 1904 [2] 206).
- $C_{14}H_{10}O_{12}N_2S_2$  \*1) 4,8-Diamido-1,3,5,7-Tetraoxy-9,10-Anthrachinon-2,6-Disulfonsäure (*C.* 1903 [2] 1130).
- 3) 4,8-Dihydroxylamido-1,5-Dioxy-9,10-Anthrachinon-2,6-Disulfonsäure (D.R.P. 100137 *C.* 1899 [1] 655). — \*III, 307.

- $C_{14}H_{10}O_{12}N_2S_2$  4) 4,5-Dihydroxylamido-1,8-Dioxy-9,10-Anthrachinon-2,7-Di-sulfonsäure (D.R.P. 100137 C. 1899 [1] 655; D.R.P. 119229 C. 1901 [1] 867). — \*III, 308.
- $C_{14}H_{10}N_2J_2S_2$  1) Jodid d. 2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol-2,5-Sulfid. Sm. 145° (J. pr. [2] 67, 221 C. 1903 [1] 1261).
- $C_{14}H_{11}ONS_2$  1) Gem. Anhydrid d. Benzolcarbonsäure u. Phenylamidodithioameisensäure (N-Phenyl-S-Benzoyldithiourethan). Sm. 64° (B. 36, 3527 C. 1903 [2] 1326).
- $C_{14}H_{11}ON_2Cl$  4) Chlorid d.  $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazin- $\alpha$ -Carbonsäure. Sm. 101–102° (B. 36, 1358 C. 1903 [1] 1339).
- $C_{14}H_{11}O_2NCl_4$  2) 2,3,5,6-Tetrachlor-1,4-Benzochinon + Dimethylamidobenzol. Sm. 105° (B. 37, 179 C. 1904 [1] 653).
- $C_{14}H_{11}O_2NBr_2$  3) Methyläther d. 2,6-Dibrom-4-Benzoylamido-1-Oxybenzol. Sm. 180° (Soc. 81, 1480 C. 1903 [1] 23, 144).
- $C_{14}H_{11}O_2N_2Cl$  10) 2-Methylphenyl-6-Chlor-3-Nitrobenzylidenamin. Sm. 125° (M. 25, 370 C. 1904 [2] 322).
- 11) 4-Methylphenyl-6-Chlor-3-Nitrobenzylidenamin. Sm. 133° (M. 25, 370 C. 1904 [2] 322).
- 12) s-Benzoyl-4-Chlorphenylharnstoff. Sm. 235–237° (Ann. 30, 416 C. 1904 [1] 240).
- $C_{14}H_{11}O_3NBr_2$  3) 2-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 175–178° (A. 332, 195 C. 1904 [2] 210).
- 4) 3-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 167° (A. 332, 196 C. 1904 [2] 210).
- $C_{14}H_{11}O_3NS_2$  1) 3,4-Methylenäther d. 2-Thiocarbonyl-4-Keto-3-Allyl-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 151° (M. 24, 511 C. 1903 [2] 837).
- $C_{14}H_{11}O_3N_2Br$  3) Methylester d. 3-Brom-1-Benzylidenamido-2-Keto-1,2-Dihydro-pyridin-5-Carbonsäure. Sm. 173° (B. 37, 3838 C. 1904 [2] 1615).
- $C_{14}H_{11}O_3N_2S$  2) Äthyläther d. 5-Phtalylamido-2-Merkapto-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 230–231° (Ann. 32, 142 C. 1904 [2] 957).
- $C_{14}H_{11}O_4N_2Br$  1) 2-Methylphenylamid d. 3-Brom-5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 250° (G. 34 [1] 276 C. 1904 [1] 1499).
- 2) 4-Methylphenylamid d. 3-Brom-5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 256° u. Zers. (G. 34 [1] 276 C. 1904 [1] 1499).
- $C_{14}H_{11}O_4N_3Cl_4$  1) 2,4,5,6-Tetrachlor-1,3-Dinitrobenzol + Dimethylamidobenzol. Sm. 113° (B. 37, 178 C. 1904 [1] 653).
- $C_{14}H_{11}O_4N_4Cl_3$  \*1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Nitrophenylamido]äthan. Sm. 216° (C. 1903 [1] 140).
- 2)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2-Nitrophenylamido]äthan. Sm. 171° (C. 1903 [1] 140).
- 3)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Nitrophenylamido]äthan. Sm. 212° (C. 1903 [1] 140).
- $C_{14}H_{11}O_4ClS$  1) 1-[2-Methylphenyl]ester d. Benzol-1-Carbonsäure-2-Sulfonsäurechlorid. Sm. 112° (Ann. 30, 309 C. 1903 [2] 1122).
- $C_{14}H_{11}O_5N_3Cl_2$  1) Äthyläther d. p-Dichlor-2',4'-Dinitro-2-Oxydiphenylamin. Sm. 185–186° (B. 36, 3269 C. 1903 [2] 1127).
- $C_{14}H_{11}O_6N_4Cl_3$  1) 2,4,6-Trichlor-1,3,5-Trinitrobenzol + Dimethylamidobenzol. Sm. 78° (B. 37, 178 C. 1904 [1] 653).
- $C_{14}H_{11}O_6N_4Br_2$  1) 2,4,6-Tribrom-1,3,5-Trinitrobenzol + Dimethylamidobenzol. Zers. bei 50° (B. 37, 178 C. 1904 [1] 653).
- $C_{14}H_{12}ONCl$  \*21) 3-Chlor-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 173° (B. 37, 1019 C. 1904 [1] 1202).
- 22) Methyläther d.  $\alpha$ -Chlor- $\alpha$ -Phenylimido- $\alpha$ -[4-Oxyphenyl]methan. Sm. 70°; Sd. 220–230°<sub>17</sub> (Ann. 30, 37 C. 1903 [2] 363).
- 23) Diphenylamid d. Chloressigsäure. Sm. 118° (Ar. 241, 220 C. 1903 [2] 104).
- $C_{14}H_{12}ON_2S$  9) Di[Phenylamid] d. Thiooxalsäure. Sm. 144–145° (B. 37, 3720 C. 1904 [2] 1450).
- $C_{14}H_{12}O_2NCl_3$  1) 2,3,5-Trichlor-1,4-Benzochinon + Dimethylamidobenzol. Sm. 65° (B. 37, 180 C. 1904 [1] 653).
- $C_{14}H_{12}O_2NBr$  7) Phenylamidoformiat d. 3-Brom-4-Oxy-1-Methylbenzol. Sm. 135° (B. 36, 2875 Ann. C. 1903 [2] 834).

- $C_{14}H_{11}O_2N_2S$  9) 4-Methylphenylcyanamid d. Benzolsulfonsäure. Sm. 88° (B. 37, 2810 C. 1904 [2] 592).
- $C_{14}H_{11}O_2N_2S_2$  1) Farbstoff (aus 4-Dimethylamido-4'-Oxydiphenylamin). Zn, +  $NaHSO_3$  +  $2H_2O$  (J. pr. [2] 69, 168 C. 1904 [1] 1268).
- $C_{14}H_{11}O_2N_2Br$  2) Phenylamid d. 5-Brom-4-Oxy-3-Methylphenylazoameisensäure. Sm. 212—213° (A. 334, 192 C. 1904 [2] 835).
- $C_{14}H_{11}O_3NCl$  1) 2-Chlorbenzyläther d. 3-Nitro-4-Oxy-1-Methylbenzol. Sm. 104° (D.R.P. 142061 C. 1903 [2] 83).
- 2) 4-Chlorbenzyläther d. 3-Nitro-4-Oxy-1-Methylbenzol. Sm. 103° (D.R.P. 142061 C. 1903 [2] 83).
- $C_{14}H_{11}O_3NBr$  2) Benzyläther d. 5-Brom-3-Nitro-2-Oxy-1-Methylbenzol. Fl. (D.R.P. 142899 C. 1903 [2] 83).
- $C_{14}H_{11}O_3N_2S$  3) 4-Methoxyphenylcyanamid d. Benzolsulfonsäure. Sm. 90—91° (B. 37, 2811 C. 1904 [2] 593).
- $C_{14}H_{11}O_4N_2S$  5)  $\alpha$ -Benzoyl- $\beta$ -Phenylsulfonharnstoff. Sm. 208° (B. 36, 3220 C. 1903 [2] 1056; B. 37, 695 C. 1904 [1] 1074).
- $C_{14}H_{11}O_4N_2S_2$  4) O-4-Sulfophenylamid d. Phenylthiooxaminsäure.  $Na_2$  (B. 37, 3723 C. 1904 [2] 1450).
- $C_{14}H_{11}O_4N_3J_3$  1) 2,4,6-Trijod-1,3-Dinitrobenzol + Dimethylamidobenzol. Sm. 160° (B. 37, 179 C. 1904 [1] 653).
- $C_{14}H_{11}O_5N_2J$  1) Aethyläther d. 2-Jod-4-[2,4-Dinitrophenyl]amido-1-Oxybenzol. Sm. 172° (B. 29, 2596).
- $C_{14}H_{11}O_5N_4S$  2) 4'-Nitro-2'-Thioureido-4-Oxydiphenylamin-3-Carbonsäure (D.R.P. 139679 C. 1903 [1] 748).
- $C_{14}H_{11}O_6N_5Cl$  1) 4'-Chlor-4,6-Dinitro-5-Methylnitramido-2-Methyldiphenylamin. Sm. 193° (J. pr. [2] 67, 527 C. 1903 [2] 239).
- $C_{14}H_{11}O_6Cl_2S_2$  1) 4,4'-Dichlor-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Ba +  $3\frac{1}{2}H_2O$  (J. pr. [2] 66, 571 C. 1903 [1] 519).
- $C_{14}H_{11}O_8N_2S_2$  3) 4-Nitro-4'-Amido-s-Diphenyläthen-2,2'-Disulfonsäure. Na (Bl. [3] 29, 348 C. 1903 [1] 1226).
- $C_{14}H_{11}O_{10}N_2S_2$  \*1)  $\alpha\beta$ -Di[4-Nitrophenyl]äthan-2,2'-Disulfonsäure (Soc. 85, 1427 C. 1904 [2] 1739).
- $C_{14}H_{11}ONBr_2$  2) Methylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 67—68° (A. 332, 225 C. 1904 [2] 203).
- $C_{14}H_{11}ONS$  \*1) 4-Acetylamidodiphenylsulfid. Sm. 148° (B. 36, 115 C. 1903 [1] 454).
- $C_{14}H_{11}ONS_2$  1) 2-Thiocarbonyl-4-Keto-5-Cinnamyliden-3-Aethyltetrahydrothiazol. Sm. 187° (M. 25, 177 C. 1904 [1] 895).
- $C_{14}H_{11}ON_2Br$  7) 2-Oxy-3-[4-Bromphenylhydrazon]methyl-1-Methylbenzol. Sm. 108° (B. 35, 4105 C. 1903 [1] 149).
- 8) 4-Oxy-3-[4-Bromphenylhydrazon]methyl-1-Methylbenzol. Sm. 181° u. Zers. (B. 35, 4105 C. 1903 [1] 149).
- 9) Aethyläther d. 2'-Brom-4-Oxyazobenzol. Sm. 39° (B. 36, 3864 C. 1904 [1] 91).
- 10) Aethyläther d. 3'-Brom-4-Oxyazobenzol. Sm. 68° (B. 36, 3868 C. 1904 [1] 92).
- $C_{14}H_{11}ON_2J$  2) 4'-Jodoso-2,3'-Dimethylazobenzol. Zers. bei 273° (J. pr. [2] 69, 323 C. 1904 [2] 35).
- $C_{14}H_{11}ON_2S$  \*4)  $\beta$ -Benzoylamido- $\alpha$ -Phenylthioharnstoff. Sm. 166—167° (B. 37, 2330 C. 1904 [2] 313).
- $C_{14}H_{11}O_2NS_2$  1) Methyläther d. 2-Thiocarbonyl-4-Keto-3-Allyl-5-[4-Oxybenzyliden]tetrahydrothiazol. Sm. 114° (M. 24, 510 C. 1903 [2] 836).
- $C_{14}H_{11}O_2N_2J$  1) 4'-Jodo-2,3'-Dimethylazobenzol. Sm. 180° (J. pr. [2] 69, 323 C. 1904 [2] 35).
- $C_{14}H_{11}O_2N_3Cl_2$  1) 4,4'-Dichlor-2,3'-Dimethylazobenzol-1-Dichlormethyl-1-Methyl-1,4-Di-3,3'-Dimethylazobenzol. Zers. (B. 35, 4213 C. 1903 [1] 161).
- $C_{14}H_{11}O_2N_3S$  \*1) s-Phenyl-2-Nitro-4-Methylphenylthioharnstoff. Sm. 145° (B. 36, 1138 C. 1903 [1] 1220).
- $C_{14}H_{11}O_3NS$  11) Methyl-4-Phenylsulfonamidophenylketon. Sm. 128° (Soc. 85, 390 C. 1904 [1] 1404).
- $C_{14}H_{11}O_5NS_2$  1) 5'-Methyläther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Allyltetrahydrothiazol. Sm. 146° (M. 25, 164 C. 1904 [1] 894).

- $C_{14}H_{19}O_4NS$  12) 2-[4-Methylphenylsulfonamidobenzol-1-Carbonsäure. Sm. 227° (B. 35, 4274 C. 1903 [2] 333 3).
- $C_{14}H_{19}O_4N_3S$  13) 1-[2-Methylphenyl]ester d. Benzol-1-Carbonsäure-2-Sulfonsäureamid. Sm. 152° (Am. 30, 300 C. 1903 [2] 1122).
- $C_{14}H_{19}O_5NS$  2)  $\alpha$ -Phtalimido- $\beta$ -Pseudoäthylthioharnstoffakrylsäure. Sm. 130 bis 131° (Am. 32, 143 C. 1904 [2] 957).
- 5) 4-Methylphenyl-[3-Nitro- $\alpha$ -Oxybenzyl]sulfon. Sm. 110° (Am. 31, 167 C. 1904 [1] 875).
- 6) 4-Methylphenyl-[4-Nitro- $\alpha$ -Oxybenzyl]sulfon. Sm. 116° (Am. 31, 168 C. 1904 [1] 875).
- 7) 2-Methyldiphenylamin-2'-Carbonsäure-4-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
- 8) 4-Methyldiphenylamin-2'-Carbonsäure-3-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
- 9) Methylester d. 3-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 197° (A. 325, 321 C. 1903 [1] 770).
- 10) Diacetylderivat d. Naphtalin-1-Sulfonsäurehydroxylamid. Sm. 104° (G. 33 [2] 307 C. 1904 [1] 288).
- $C_{14}H_{19}O_6NBr_2$  1) Diacetat d. 2,6-Dibrom-4-Diacetylamido-1,3-Dioxybenzol. Sm. 123–125° (A. 333, 362 C. 1904 [2] 1116).
- $C_{14}H_{19}O_6N_4Br$  1) 5-Brom-4-Amido-1,3-Dimethylbenzol + 1,3,5-Trinitrobenzol. Sm. 104–105° (Soc. 85, 238 C. 1904 [1] 1006).
- $C_{14}H_{19}N_2Cl_2Br$  1) 4-[4-Bromphenyl]hydrazon-1-Dichlormethyl-1-Methyl-1,4-Dihydro-1,2,4-Triazin-3-yl. (B. 35, 4213 C. 1903 [1] 161).
- $C_{14}H_{19}N_2Cl_2J$  1) 2,3'-Dimethylazobenzol-4'-Jodidchlorid. Zers. bei 101° (J. pr. [2] 69, 323 C. 1904 [2] 35).
- $C_{14}H_{14}ONCl$  1) 2-Chlorbenzyläther d. 3-Amido-4-Oxy-1-Methylbenzol. HCl (D.R.P. 142061 C. 1903 [2] 83).
- 2) 4-Chlorbenzyläther d. 3-Amido-4-Oxy-1-Methylbenzol. HCl (D.R.P. 142061 C. 1903 [2] 83).
- $C_{14}H_{14}ONBr$  8) Benzyläther d. 5-Brom-3-Amido-2-Oxy-1-Methylbenzol. HCl (D.R.P. 142899 C. 1903 [2] 83).
- $C_{14}H_{14}ON_2S$  10) 1-Methyl-2-naphthylharnstoff d. 4-Merkaptophenylharnstoff. Sm. 168° (B. 36, 2105 C. 1903 [2] 993).
- $C_{14}H_{14}O_4N_2S$  13) 2-Oxyazobenzoläthyläther-5-Sulfonsäure. Na (B. 36, 2078 C. 1903 [2] 1031).
- $C_{14}H_{14}O_5N_2S$  \*2) 2-Naphthylsulfonamidocetylramidoessigsäure ( $\beta$ -Naphtalinsulfonyl-2-Naphthylsulfonamidocetylramidoessigsäure) (B. 36, 2105 C. 1903 [1] 1304; B. 36, 2596 C. 1903 [2] 618).
- 4) 5-Nitro-2-[4-Methylphenyl]amidophenylmethan- $\alpha$ -Sulfonsäure. Na (D.R.P. 150366 C. 1904 [1] 1308).
- 5) 5-Nitro-2-[2-Methylphenyl]amidophenylmethan- $\alpha$ -Sulfonsäure. Na (D.R.P. 150366 C. 1904 [1] 1308).
- $C_{14}H_{14}O_6N_2S_2$  \*5) 4,4'-Dimethylazobenzol-3,3'-Disulfonsäure (C. 1903 [1] 1414).
- $C_{14}H_{15}ONBr_2$  1) 6-Brom-5-Oxy-2-Brommethyl-1,4-Dimethylbenzol + Pyridin. Sm. 221–223° u. Zers. (B. 36, 1890 C. 1903 [2] 291).
- $C_{14}H_{15}ON_2Br$  2) Äthyläther d. 3'-Brom-2-Amido-5-Oxydiphenylamin (B. 36, 3868 C. 1904 [1] 92).
- 3) Äthyläther d. 3'-Brom-4'-Amido-4-Oxydiphenylamin. Sm. 54° (B. 36, 3865 C. 1904 [1] 91).
- $C_{14}H_{15}ON_2P$  3) 4-Methylphenylimid-4-Methylphenylamid d. Phosphorsäure. Sm. 226–228° (Soc. 83, 1048 C. 1903 [2] 603).
- $C_{14}H_{15}O_2NS$  \*9) 2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 124–125° (Soc. 85, 377 C. 1904 [1] 1412).
- \*13) 2-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 110° (Soc. 85, 1186 C. 1904 [2] 1115).
- 15) Äthylphenylamid d. Benzolsulfonsäure. Fl. (B. 36, 2706 C. 1903 [2] 22).
- $C_{14}H_{15}O_4N_4Br$  1) Methylester d. 2-[4-Bromphenyl]amido-1,2,3,6-Oxtriazin-5-[Isobutyryl- $\alpha$ -Carbonsäure]. Sm. 159° (Soc. 83, 1252 C. 1903 [2] 1422).
- $C_{14}H_{15}O_6N_8S_2$  2) 2,2'-Dimethyldiazoamidobenzol-5,5'-Disulfonsäure (H. [3] 31, 644 C. 1904 [2] 90).

- $C_{14}H_{16}ONCl$  1) Pyridylumchlorid (aus Pyridin u. d. Methyläther d.  $\alpha$ -Chlor- $\alpha$ -[2-Oxyphenyl]äthan. Sm. 119—121° (*B.* 36, 3590 *C.* 1903 [2] 1365).
- $C_{14}H_{16}ONJ$  1) Jodmethylat d. N-Methyl- $\beta$ -Naphtomorpholin. Sm. 163—164° u. Zers. (*Soc.* 83, 763 *C.* 1903 [1] 1419 *C.* 1903 [2] 448).
- $C_{14}H_{16}O_3NP$  \*2) Phenylmonamid d. Phosphorsäureäthylphenylester. Sm. 120° (*A.* 326, 226 *C.* 1903 [1] 866).
- $C_{14}H_{16}O_3N_2S$  2) 4-Amido-4'-Sulfomethylamidodiphenylmethan. Sm. 168° (D.R.P. 148760 *C.* 1904 [1] 555).
- $C_{14}H_{16}O_3N_4S$  1) P-Diamido-P-Methylazobenzol-P-Sulfonsäure.  $NH_4$ , Na, Ba (*J. pr.* [2] 68, 301 *C.* 1903 [2] 1142).
- $C_{14}H_{16}O_5N_6Cl$  1) Methylester d.  $\delta$ -Oximido- $\alpha$ -[4-Chlorphenyl]hydroxylhydrazon- $\gamma$ -Keto- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 140°. HCl (*Soc.* 83, 1246 *C.* 1903 [2] 1421).
- $C_{14}H_{16}O_6N_2S_2$  \*3) 4,4'-Diamido-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure (*J. pr.* [2] 66, 560 *C.* 1903 [1] 518).
- $C_{14}H_{16}NJS$  1) Methyl-4-Amidophenyl-4-Methylphenylsulfinjodid. Sm. 80° (*J. pr.* [2] 68, 278 *C.* 1903 [2] 994).
- $C_{14}H_{17}ON_2Cl$  1) Verbindung (aus 4,4'-Di[Methylamido]biphenyl) (*B.* 37, 3774 *C.* 1904 [2] 1548).
- $C_{14}H_{17}O_2NBr_2$  1) Acetat d. 1-[3,5-Dibrom-2-Oxybenzyl]hexahydropyridin. Sm. 86—87°. HCl, HBr (*A.* 332, 218 *C.* 1904 [2] 202).
- $C_{14}H_{17}O_2NS_2$  1) Gem. Anhydrid d. 4-Oxybenzylmethyläther-1-Carbonsäure u. Hexahydropyridin-1-Dithiocarbonsäure (N-Piperidyl-S-p-Anisoyldithiourethan). Sm. 62—65° (*B.* 36, 3524 *C.* 1903 [2] 1326).
- $C_{14}H_{17}O_2N_2P$  3) Di[Phenylamid] d. Phosphorsäuremonoäthylester. Sm. 114° (*A.* 326, 246 *C.* 1903 [1] 868).
- $C_{14}H_{17}O_3N_2Br$  2) Isobutyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 70° (*J. pr.* [2] 45, 187). — IV, 266.
- $C_{14}H_{17}N_2JS$  1) 2-Jodmethylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Allyläther. Sm. 125° (*A.* 331, 203 *C.* 1904 [1] 1218).
- 2) 2-Jodallylat d. 5-Merkapto-3-Methyl-1-Phenyl-5-Methyläther. Sm. 142° (*A.* 331, 214 *C.* 1904 [1] 1219).
- $C_{14}H_{18}ON_3P$  1) Dimethylmonamid-Di[Phenylamid] d. Phosphorsäure. Sm. 196° (*A.* 326, 180 *C.* 1903 [1] 819).
- 2) Äthylamid-Di[Phenylamid] d. Phosphorsäure. Sm. 147° (*A.* 326, 173 *C.* 1903 [1] 819).
- $C_{14}H_{18}O_2N_2Cl_2$  1) Verbindung (aus Di[Chloromethylmethyl]äther u. Pyridin). +  $PtCl_4$ , + 2  $AuCl_3$  (*A.* 334, 3 *C.* 1901 [1] 100).
- $C_{14}H_{18}N_3SP$  1) Dimethylmonamid - Di[Phenylamid] d. Thiophosphorsäure. Sm. 209—210° (*A.* 326, 210 *C.* 1903 [1] 822).
- 2) Äthylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 106° (*A.* 326, 203 *C.* 1903 [1] 821).
- $C_{14}H_{18}ONJ_4$  1) Verbindung (aus Cineol u. 2,3,4,5-Tetrajodpyrrol). Sm. 112° u. Zers. (*Ar.* 235, 178). — \*III, 340.
- $C_{14}H_{18}O_2NBr_2$  1) N-Acetylamyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 150° (*A.* 332, 187 *C.* 1904 [2] 210).
- $C_{14}H_{18}N_2JS$  1) 2-Jodmethylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Isopropyläther +  $H_2O$ . Sm. 170—172° (wasserfrei) (*A.* 331, 202 *C.* 1904 [1] 1218).
- 2) 2-Jodmethylat d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol-5-Äthyläther. Sm. 125° (*A.* 331, 219 *C.* 1904 [1] 1219).
- 3) 2-Jodisopropylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Methyläther +  $H_2O$ . Sm. 187° (wasserfrei) (*A.* 331, 227 *C.* 1904 [1] 1220).
- $C_{14}H_{20}ONCl$  2) Nitrosochlorid d.  $\alpha$ -[2,4,6-Trimethylphenyl]- $\gamma$ -Methyl- $\alpha$ -Buten. Sm. 185° u. Zers. (*B.* 37, 930 *C.* 1904 [1] 1209).
- $C_{14}H_{20}ON_2S$  3) s-Caproyl-2-Methylphenylthioharnstoff. Sm. 97—98° (*Soc.* 85, 810 *C.* 1904 [2] 201, 519).
- 4) s-Caproyl-4-Methylphenylthioharnstoff. Sm. 90—91° (*Soc.* 85, 810 *C.* 1904 [2] 201, 520).
- $C_{14}H_{20}ON_5P$  1) Dimethylmonamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 194—195° (*A.* 326, 181 *C.* 1903 [1] 819).
- 2) Äthylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 153° (*A.* 326, 173 *C.* 1903 [1] 819).

- $C_{14}H_{20}O_3NCl$  3) Chlormethylat d. Methylanhalonidin. 2 +  $PtCl_4$  (B. 34, 3015). — \*III, 602.  
 $C_{14}H_{20}O_3NJ$  4) Jodmethylat d.  $\alpha$ -Methylhydrocotarnin. Sm. 228—229° (B. 36, 4258 C. 1904 [1] 382).  
 $C_{14}H_{20}O_8N_2S_2$  1) Diäthylester d. Benzol-1,3-Di[Sulfonamidoessigsäure]. Sm. 110° (B. 37, 4103 C. 1904 [2] 1727).  
 $C_{14}H_{23}O_2NS$  \*3) Diisobutylamid d. Benzolsulfonsäure. Sm. 55—56° (B. 36, 2706 C. 1903 [2] 829).  
 $C_{14}H_{23}O_3N_2J$  1) Jodpropylat d. Pilocarpin (B. 35, 2455). — \*III, 684.  
 $C_{14}H_{23}O_3NS$  1) Methylamid d.  $\delta$ -Oxy- $\delta$ -Phenylheptan- $\delta^2$ -Sulfonsäure. Sm. 122 bis 123° u. Zers. (B. 37, 3267 C. 1904 [2] 1031).  
 $C_{14}H_{24}O_4N_3S$  1) Semicarbazon d. Dihydro- $\alpha$ -Jononsulfonsäure. Sm. 203° u. Zers. Na (C. 1904 [1] 280).  
 $C_{14}H_{30}N_3SP$  1) Diäthylmonamid-1,1-Dipiperidid d. Thiophosphorsäure. Sm. 126° (A. 326, 212 C. 1903 [1] 822).  
 2) Isobutylmonamid-1,1-Dipiperidid d. Thiophosphorsäure. Sm. 106° (A. 326, 205 C. 1903 [1] 821). — \*IV, 10.  
 $C_{14}H_{33}ON_2P$  1) Äthyläther d. Di[Dipropylamido]oxyphosphin. Sd. 143—147°<sub>29</sub> (A. 326, 164 C. 1903 [1] 761).  
 $C_{14}H_{33}O_3N_2P$  1) Di[Dipropylamid] d. Phosphorsäuremonoäthylester. Sd. 164 bis 166°<sub>20</sub> (A. 326, 165 C. 1903 [1] 762).

## — 14 V —

- $C_{14}H_5O_{11}N_2BrS$  1) p-Bromdinitro-1,5-Dioxy-9,10-Anthrachinon-p-Sulfonsäure (D.R.P. 114200 C. 1900 [2] 930). — \*III, 306.  
 2) Bromdinitro-1,8-Dioxy-9,10-Anthrachinonsulfonsäure. (D.R.P. 114200 C. 1900 [2] 930). — \*III, 308.  
 $C_{14}H_6ONBrS_2$  1) Bromindophtenin (B. 37, 3351 C. 1904 [2] 1058).  
 $C_{14}H_6O_2NCl_2Br$  1) Phenylimid d. 3,5-Dichlor-4-Brombenzol-1,2-Dicarbonsäure. Sm. 200—200,5° (Soc. 85, 277 C. 1904 [1] 1009).  
 $C_{14}H_7O_4NCl_2S$  1) Dichloramid d. 9,10-Anthrachinon-2-Sulfonsäure. Sm. 177° (C. 1904 [2] 435).  
 $C_{14}H_8ON_2Br_4S$  1) Tetrabrommethylenviolett (B. 37, 2621 C. 1904 [2] 484; B. 37, 3032 C. 1904 [2] 1012).  
 $C_{14}H_9O_5N_2ClS$  1) 6- oder 7-Chlor-3-Oxy-2-[2-Oxyphenyl]-1,4-Benzdiazin-p-Sulfonsäure. Na + 3H<sub>2</sub>O, Ba (B. 35, 4335 C. 1903 [1] 293).  
 $C_{14}H_9O_7N_2BrS$  1) p-Brom-4,5-Diamido-1,8-Dioxy-9,10-Anthrachinon-2-Sulfonsäure (D.R.P. 114200 C. 1900 [2] 930). — \*III, 308.  
 2) Bromdiamido-1,5-Dioxy-9,10-Anthrachinonsulfonsäure (D.R.P. 114200 C. 1900 [2] 930). — \*III, 307.  
 $C_{14}H_{10}O_6NCIS$  1) 2-Chlorid d. 4-Nitrobenzol-1-Carbonsäure-[2-Methylphenyl] ester-2-Sulfonsäure. Sm. 150° (Am. 30, 379 C. 1904 [1] 275).  
 2) 2-Chlorid d. 4-Nitrobenzol-1-Carbonsäure-[4-Methylphenyl] ester-2-Sulfonsäure. Sm. 152° (Am. 30, 380 C. 1904 [1] 275).  
 $C_{14}H_{12}O_5NCIS$  1) Methyl-4-Phenylsulfonchloramidphenylketon. Sm. 91° (Soc. 85, 390 C. 1904 [1] 1404).  
 $C_{14}H_{14}O_2NCIS$  1) 6-Chlor-2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 148—149° (C. 1904 [1] 1075; Soc. 85, 377 C. 1904 [1] 1412).  
 2) 2-Methylphenylchloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 101° (Soc. 85, 1186 C. 1904 [2] 1115).  
 3) 4-Methylphenylchloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 109° (Soc. 85, 1186 C. 1904 [2] 1115).  
 $C_{14}H_{14}O_2NJS$  2) Methyl-3-Jodphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 81° (A. 332, 60 C. 1904 [2] 41).  
 $C_{14}H_{14}O_3N_2Cl_2S$  1) 3,3'-Dichlor-4-Amido-4'-Sulfonäthylamidodiphenylmethan. Sm. 168—169° (D.R.P. 148760 C. 1904 [1] 1001).  
 $C_{14}H_{18}ON_2ClP$  2) Phenylamid-Äthylphenylamid d. Phosphorsäuremono-chlorid. Sm. 113° (A. 326, 255 C. 1903 [1] 869).  
 3) Di[4-Methylphenylamid] d. Phosphorsäuremonochlorid. Sm. 210° (A. 326, 249 C. 1903 [1] 868).  
 $C_{14}H_{33}ON_2SP$  1) Di[Dipropylamid] d. Thiophosphorsäuremonoäthylester. Sd. 178—180°<sub>22</sub> (A. 326, 165 C. 1903 [1] 761).

**C<sub>15</sub>-Gruppe.**

- C<sub>15</sub>H<sub>12</sub>** \*2) 2-Methylantracen (*Soc.* 81, 1581 *C.* 1903 [1] 34, 167).  
 8) Kohlenwasserstoff (aus  $\beta$ -Chlor- $\alpha\gamma$ -Diphenylpropen). Sm. 121,5° (*B.* 37, 1144 *C.* 1904 [1] 1266).
- C<sub>15</sub>H<sub>14</sub>** \*1)  $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthen. Sm. 117° (*B.* 35, 3967 *C.* 1903 [1] 31).  
 \*4)  $\alpha\alpha$ -Diphenylpropen. Sm. 52°; Sd. 149°<sub>11</sub> (*B.* 37, 232 *C.* 1904 [1] 660; *B.* 37, 1450 *C.* 1904 [1] 1352).  
 \*5)  $\alpha\beta$ -Diphenylpropen. Sm. 82—83° (*B.* 36, 1495 *C.* 1903 [1] 1351; *B.* 37, 458 *C.* 1904 [1] 949; *B.* 37, 1134 *C.* 1904 [1] 1256; *C. r.* 139, 482 *C.* 1904 [2] 1038).
- C<sub>15</sub>H<sub>16</sub>** \*1)  $\alpha\beta$ -Diphenylpropan. Sd. 277—279° (*B.* 37, 1450 *C.* 1904 [1] 1352).  
 \*9)  $\alpha\alpha$ -Diphenylpropan. Sd. 139°<sub>11</sub> (*B.* 37, 1450 *C.* 1904 [1] 1352).
- C<sub>15</sub>H<sub>22</sub>** 8) Kohlenwasserstoff (aus  $\alpha$ -Homodipnopinakolin) (*C.* 1903 [1] 880).
- C<sub>15</sub>H<sub>24</sub>** \*3) d-Cadinen (*Ar.* 241, 148 *C.* 1903 [1] 1029).  
 \*16) Patschoulen. Sd. 112—115°<sub>12-12,5</sub> (*Ar.* 241, 41 *C.* 1903 [1] 713).  
 \*23) Guajen. Sd. 123—124°<sub>9</sub> (*Ar.* 241, 43 *C.* 1903 [1] 713).  
 45) Amorphen. Sd. 250—270° (*C.* 1904 [2] 224).  
 46) Atractylen. Sd. 125—126°<sub>10</sub> (*Ar.* 241, 33 *C.* 1903 [1] 712).  
 47) polym. Atractylen. Sd. 133—141°<sub>14,5</sub> (*Ar.* 241, 34 *C.* 1903 [1] 712).  
 48) d-Cadinen. Sd. 260—261° (274—275°) (*Ar.* 240, 291 *C.* 1902 [2] 124; *C. r.* 135, 1058 *C.* 1903 [1] 233). — \*III, 402.  
 49) d-Galipen. Sd. 258—259° (*Ar.* 235, 528; 236, 394). — \*III, 403.  
 50) l-Galipen. Sd. 265° (*Ar.* 235, 641, 642). — \*III, 403.  
 51) Vetiven. Sd. 262—263°<sub>740</sub> (*C. r.* 135, 1060 *C.* 1903 [1] 234).  
 52) Sesquiterpen (aus Citronellöl). Sd. 260—270° u. Zers. (*C.* 1899 [2] 879). — \*III, 403.  
 53) Sesquiterpen (aus Citronellöl). Sd. 272—275°<sub>760</sub> (*C.* 1899 [2] 879). — \*III, 403.  
 54) d-Sesquiterpen (aus Eucalyptusöl). Sd. 265,5—266°<sub>750</sub> (*C.* 1904 [1] 1264).  
 55) l-Sesquiterpen (aus Eucalyptusöl). Sd. 247—248°<sub>748</sub> (*C.* 1904 [1] 1264).  
 56) Sesquiterpen (aus Limettöl). Sd. 262—263°<sub>750</sub> (*Soc.* 85, 415 *C.* 1904 [1] 1443).  
 57) Sesquiterpen (aus Patschouliöl). Sd. 264—265°<sub>750</sub> (*B.* 37, 3354 *C.* 1904 [2] 1308).
- C<sub>15</sub>H<sub>20</sub>** 3) Dihydroisocaryophyllen. Sd. 137—138°<sub>19</sub> (*B.* 36, 1038 *C.* 1903 [1] 1135).
- C<sub>15</sub>H<sub>30</sub>** 6) Spilanthen. Sd. 220—225° (*Ar.* 241, 278 *C.* 1903 [2] 451).

## — 15 II —

- C<sub>15</sub>H<sub>8</sub>O<sub>9</sub>** C 54,6 — H 1,8 — O 43,6 — M. G. 330.  
 1) 2, 3, 2', 3'-Dicarbonat d. Kohlensäuredi[2, 3-Dioxyphenylester] (Dipyrrogalloltricarbonat). Sm. 177° (*B.* 37, 107 *C.* 1904 [1] 584).
- C<sub>15</sub>H<sub>8</sub>O<sub>5</sub>** 6) Alochrysin? Sm. 223—224° (*Ar.* 237, 89). — \*III, 455.
- C<sub>15</sub>H<sub>8</sub>O<sub>6</sub>** 4) Rhein. Sm. 313—314° (*C.* 1903 [1] 297; *Ar.* 240, 610 *C.* 1903 [1] 176; *C.* 1904 [1] 1077).  
 5) 1,4-Dioxy-9,10-Anthrachinon-2-Carbonsäure? (D.R.P. 84505). — \*II, 1185.  
 6) Diacetat d. Anhydropurpurogallon. Sm. 174—176° (*Soc.* 83, 198 *C.* 1903 [1] 402, 639).  
 7) Diacetat d. Anhydroisopurpurogallon. Sm. 280—282° (*Soc.* 83, 198 *C.* 1903 [1] 402, 640).
- C<sub>15</sub>H<sub>8</sub>O<sub>10</sub>** C 51,7 — H 2,3 — O 46,0 — M. G. 348.  
 1) Galloflavin (oder C<sub>15</sub>H<sub>8</sub>O<sub>9</sub>) (*M.* 25, 603 *C.* 1904 [2] 907).
- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>** \*7) 3-Phenyl-1,2-Benzpyron. Sm. 137° (140°) (*C.* 1903 [1] 89; *B.* 37, 3165 *C.* 1904 [2] 983).  
 \*9) 2-Phenyl-1,4-Benzpyron (*B.* 37, 2635 *C.* 1904 [2] 540).  
 \*11) Anthracen-1-Carbonsäure (*B.* 37, 648 *C.* 1904 [1] 892).  
 19) Phenyläther d.  $\gamma$ -Keto- $\alpha$ -Oxy- $\gamma$ -Phenylpropin. Sm. 69°; Sd. 178 bis 179°<sub>20</sub> (*B.* 36, 293 *C.* 1903 [1] 581).

- $C_{15}H_{10}O_8$
- \*1)  $\alpha\beta\gamma$ -Triketo- $\alpha\gamma$ -Diphenylpropan. Sm. 66—67° (B. 37, 1531 C. 1904 [1] 1609).
  - \*6)  $\beta$ -Phenylumbelliferon (B. 36, 193 C. 1903 [1] 469).
  - \*8) 7-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 242—243° (J. pr. [2] 67, 342 C. 1903 [1] 1361).
  - 23) Methyläther d. 1-Oxy-9,10-Anthrachinon. Sm. 140—145° (D.R.P. 75054). — \*III, 300.
  - 24) Methyläther d. 2-Oxy-9,10-Anthrachinon. Sm. 195—196° (B. 37, 65 C. 1904 [1] 520).
  - 25) 3-Oxy-2-Phenyl-1,4-Benzpyron (Flavonol). Sm. 169—170° (B. 37, 2820 C. 1904 [2] 712).
  - 26) 2-Acetyl-3,4- $\beta$ -Naphtopyron ( $\alpha$ -Acetyl- $\beta$ -Naphthocumarin). Sm. 187° (B. 36, 1973 C. 1903 [2] 377).
  - 27) 2-Oxyphenanthren-3-Carbonsäure. Sm. 277° (B. 35, 4425 C. 1903 [1] 334).
  - 28) 3-Oxyphenanthrencarbonsäure. Sm. 303° u. Zers. (B. 35, 4425 C. 1903 [1] 334).
  - 29) Methylester d. 9-Ketofluoren-2-Carbonsäure. Sm. 181° (M. 25, 451 C. 1904 [2] 450).
- $C_{15}H_{10}O_4$
- \*2) 5,7-Dioxy-2-Phenyl-1,4-Benzpyron (B. 37, 3168 C. 1904 [2] 1059).
  - \*8) Chrysophansäure. Sm. 176° (Soc. 81, 1583 C. 1903 [1] 34, 167; Ar. 240, 602 C. 1903 [1] 176; Soc. 83, 1327 C. 1904 [1] 100; C. 1904 [1] 1077).
  - 40) Sennachrysophansäure. Sm. 171—172° (Ar. 238, 435). — \*III, 324.
  - 41) 2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 224° (B. 30, 1082). — \*III, 531.
  - 42) 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 233—234° (B. 37, 777 C. 1904 [1] 1156).
  - 43) 3,7-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 257—259° (B. 37, 1182 C. 1904 [1] 1275).
  - 44) 7,8-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 239° (B. 36, 4242 C. 1904 [1] 382).
  - 45) 5,7-Dioxy-4-Phenyl-2,1-Benzpyron. Sm. 293° (D.R.P. 73700). — \*II, 1144.
- $C_{15}H_{10}O_5$
- \*6) Emodin. Sm. 254—255° (Ar. 240, 607 C. 1903 [1] 176; Soc. 83, 1329 C. 1904 [1] 100; C. 1904 [1] 1077).
  - \*15) 3,5,7-Trioxo-2-Phenyl-1,4-Benzpyron +  $H_2O$  (Galangin). Sm. 217—218°. K +  $H_2O$  (Soc. 83, 135 C. 1903 [1] 89, 466; B. 37, 2805 C. 1904 [2] 712).
  - 42) isom. Monomethyläther d. 1,2,3-Trioxo-9,10-Anthrachinon. Sm. 233° (M. 23, 1017 C. 1903 [1] 291).
  - 43) Emodin (aus Feroxaloe). Sm. 216° (Ar. 241, 348 C. 1903 [2] 720).
  - 44) isom. Isoemodin. Sm. 212° (C. 1904 [1] 1077).
  - 45) 5,6-Dioxy-2-Keto-1-[2-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 214—216° (B. 29, 2433). — \*III, 533.
  - 46) 5,6-Dioxy-2-Keto-1-[3-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 221—223° (B. 29, 2433). — \*III, 533.
  - 42) 5,6-Dioxy-2-Keto-1-[4-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 220° (B. 29, 2434). — \*III, 533.
  - 47) 3,7,8-Trioxo-2-Phenyl-1,4-Benzpyron. Sm. 249° (B. 37, 2808 C. 1904 [2] 713).
  - 48) 3,6-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 242—243° (B. 37, 2348 C. 1904 [2] 230).
  - 49) 3,6-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 300° u. Zers. (B. 37, 960 C. 1904 [1] 1160).
  - 50) 3,6-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 340° u. Zers. (B. 37, 784 C. 1904 [1] 1159).
  - 51) 3,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 271° (B. 37, 4158 C. 1904 [2] 1658).
  - 52) 3,7-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 298—300° (B. 37, 4160 C. 1904 [2] 1658).
  - 53) 3,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 310° (B. 37, 4162 C. 1904 [2] 1659).

- $C_{15}H_{10}O_6$  \*3) 3,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron +  $H_2O$  (Fisetin). Sm. 330° u. Zers. (B. 37, 790 C. 1904 [1] 1157).  
 \*4) Luteolin +  $H_2O$  (B. 37, 2627 C. 1904 [2] 538).  
 \*6) Rhein. Sm. 314° (Ar. 241, 604 C. 1904 [1] 168).  
 \*18) 3,5,7-Trioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Kämpferol). Sm. 275° (B. 37, 2098 C. 1904 [2] 121; C. 1904 [2] 453).  
 \*20) Robigenin +  $H_2O$ . Sm. 270° (C. 1904 [1] 1610; Ar. 242, 223 C. 1904 [1] 1651).  
 21) 3,6-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 335° u. Zers. (B. 37, 781 C. 1904 [1] 1156).  
 22) 3,7,8-Trioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 298° u. Zers. (B. 37, 2630 C. 1904 [2] 539).  
 23) 3,7,8-Trioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 260° (B. 37, 2633 C. 1904 [2] 540).  
 24) Pigment d. Geraniums.  $K_2$  (B. 36, 3959 C. 1904 [1] 39).
- $C_{15}H_{10}O_7$  \*1) 3,5,7-Trioxy-2-[2,4-Dioxyphenyl]-1,4-Benzpyron (Morin) (B. 37, 2350 C. 1904 [2] 230).  
 \*2) 3,5,7-Trioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Quercetin; Sophoretin). Sm. 313—314° u. Zers. (B. 37, 1404 C. 1904 [1] 1356; Ar. 242, 550 C. 1904 [2] 1405).
- $C_{15}H_{11}N$  \*2) 2-Phenylchinolin. Sm. 84°; Sd. 363° (C. 1904 [2] 454; M. 25, 621 C. 1904 [2] 1154).  
 \*9) Nitril d.  $\alpha\beta$ -Diphenylakrylsäure. Sm. 86° (B. 36, 2862 C. 1903 [2] 1129).
- $C_{15}H_{12}O$  \*4) Benzylidenacetophenon. HCl (B. 37, 1652 C. 1904 [1] 1603).  
 12) 3-Keto-1-Phenyl-2,3-Dihydroinden. Sm. 78° (Am. 31, 650 C. 1904 [2] 446).
- $C_{15}H_{12}O_2$  \*7) Dibenzoylmethan. Sm. 78° (B. 36, 3677 C. 1903 [2] 1442).  
 \*15) 2,7-Dimethylxanthon (C. r. 136, 1568 C. 1903 [2] 384).  
 \*17) 4,5-Dimethylxanthon. Sm. 172° (C. r. 136, 1007 C. 1903 [1] 1267; Bl. [3] 31, 267 C. 1904 [1] 1089).  
 \*27) Laktone d. 6-Oxy-3-Methyldiphenylelessigsäure. Sm. 106°; Sd. 213°<sub>16</sub> (B. 36, 4001 C. 1904 [1] 174).  
 39) 3,4-Methylenäther d.  $\alpha$ -Phenyl- $\beta$ -[3,4-Dioxyphenyl]äthen. Sm. 95—96° (B. 37, 1432 C. 1904 [1] 1351).  
 40) 3-Methyläther d. 3,4-Dioxyphenanthren (Methylmorphol). Sm. 65° (B. 37, 3497 C. 1904 [2] 1320).  
 41) 2-Phenyl-2,3-Dihydro-1,4-Benzpyron (Flavanon). Sm. 75—76° (B. 37, 2634 C. 1904 [2] 540).  
 42) 2-Aethyl-3,4- $\beta$ -Naphtopyron ( $\alpha$ -Aethyl- $\beta$ -Naphtocumarin). Sm. 110° (B. 36, 1970 C. 1903 [2] 377).  
 43) Methylester d. Fluoren-2-Carbonsäure. Sm. 120° (M. 25, 449 C. 1904 [2] 449).  
 44) Benzoat d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. Sm. 41°; Sd. 229—230°<sub>50</sub> (Soc. 83, 152 C. 1903 [1] 72, 436; B. 36, 3675 C. 1903 [2] 1442).
- $C_{15}H_{12}O_3$  \*7) Chrysophanhydroanthron. Sm. oberh. 200° (Ar. 240, 606 C. 1903 [1] 176).  
 \*15)  $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]akrylsäure. Sm. 172° (B. 37, 4132 Anm. C. 1904 [2] 1736).  
 \*28) Methylester d. 2-Benzoylbenzol-1-Carbonsäure. Sm. 52°; Sd. 350 bis 352° (M. 25, 475 C. 1904 [2] 336).  
 \*37) 8-Oxy-5,7-Dimethylfluoron (M. 25, 319 C. 1904 [1] 1495).  
 \*38) Chrysarobin. Sm. 202° (Soc. 81, 1578 C. 1903 [1] 33, 166).  
 42) isom. Methylester d. 2-Benzoylbenzol-1-Carbonsäure. Sm. 80—81°; Sd. 345—348° (M. 25, 477 C. 1904 [2] 337).
- $C_{15}H_{12}O_4$  \*5)  $\beta\beta$ -Dioxy- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan. Sm. 89° (B. 37, 1531 C. 1904 [1] 1609).  
 \*11) 2-[4-Methoxybenzoyl]benzol-1-Carbonsäure. Sm. 142—143° (B. 36, 2965 C. 1903 [2] 1007).  
 \*22) Monobenzylester d. Benzol-1,2-Dicarbonsäure. Sm. 104° (106—107°) (B. 35, 4093 C. 1903 [1] 76; J. pr. [2] 68, 242 Anm. C. 1903 [2] 1063).  
 \*34) Dibenzoat d. Dioxymethan (C. 1903 [2] 656).  
 35) Aldehyd d. 3-Benzoxyl-4-Methoxybenzol-1-Carbonsäure. Sm. 75° (B. 35, 4398 C. 1903 [1] 341).

- $C_{15}H_{12}O_5$  14) Butein +  $H_2O$ . Sm. 213—215° (wasserfrei) (*C.* 1903 [1] 1415; 1904 [2] 451).
- 15) Butin +  $\frac{1}{2}H_2O$ . Sm. 224—226° (*C.* 1903 [1] 1415; 1904 [2] 453).
- $C_{15}H_{12}O_6$  16) 3,5-Dioxybenzoat d.  $\alpha$ -Oxymethylphenylketon. Sm. 206° (D.R.P. 73700). — \*III, 103.
- $C_{15}H_{12}O_7$  12) Farbstoff (aus *Rosa gallica*). Sm. noch nicht bei 220° (*C.* 1904 [2] 1405).
- 5) Verbindung (aus 1,3,4-Triketo-2-Methyl-1,2,3,4-Tetrahydroisochinolin). Sm. 199° (*B.* 37, 1945 *C.* 1904 [2] 124).
- $C_{15}H_{12}N_2$  \*2) 1,3-Diphenylpyrazol. Sm. 84—85° (*B.* 36, 3988 *C.* 1904 [1] 171).
- \*4) 3,5-Diphenylpyrazol. Sm. 199—200° (*C. r.* 136, 1264 *C.* 1903 [2] 122).
- \*6) 4,5-Diphenylimidazol. Sm. 227°.  $HCl$ ,  $H_2SO_4$  (*B.* 35, 4139 *C.* 1903 [1] 295).
- $C_{15}H_{12}N_4$  \*1) 4-Phenylazo-1-Phenylpyrazol. Sm. 124° (*B.* 36, 3669 *C.* 1903 [2] 1313).
- $C_{15}H_{13}N$  23) 3,7-Dimethylakridin. Sm. 176° (171°). ( $2HCl$ ,  $PtCl_4$ ),  $HNO_3$ , Bichromat (*B.* 36, 590 *C.* 1903 [1] 724; *B.* 36, 1018 *C.* 1903 [1] 1268).
- $C_{15}H_{13}N_3$  18) 3-[4-Nitrophenyl]-5-Phenylpyrazol. Sm. 179° (*B.* 37, 1152 *C.* 1904 [1] 1267).
- 19) 2-[ $\beta$ -2-Amidophenyläthenyl]benzimidazol. Sm. 213° (*C.* 1904 [1] 103).
- 20) 2-[ $\beta$ -3-Amidophenyläthenyl]benzimidazol +  $\frac{1}{2}H_2O$ . Sm. 116° (153° wasserfrei).  $HCl$ , ( $2HCl$ ,  $PtCl_4$ ) (*C.* 1904 [1] 103).
- 21) 2-[ $\beta$ -4-Amidophenyläthenyl]benzimidazol. Sm. 225°.  $2HCl$  (*C.* 1904 [1] 103).
- $C_{15}H_{13}Cl$  3)  $\beta$ -Chlor- $\alpha\gamma$ -Diphenylpropen. Sd. 240° u. Zers. (*B.* 37, 1143 *C.* 1904 [1] 1266).
- $C_{15}H_{13}Br$  1)  $\beta$ -Brom- $\alpha\alpha$ -Diphenylpropen. Sm. 48—49°; Sd. 169—170°<sub>12</sub> (*B.* 37, 232 *C.* 1904 [1] 660).
- $C_{15}H_{14}O$  \*1) Methyläther d.  $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]äthen. Sm. 135—136° (*B.* 37, 457 *C.* 1904 [1] 949; *A.* 333, 269 *C.* 1904 [2] 1392).
- \*6) Dibenzylketon (*B.* 37, 1428 *C.* 1904 [1] 1355).
- 21)  $\gamma$ -Oxy- $\alpha\gamma$ -Diphenylpropen. Fl. (*Am.* 31, 660 *C.* 1904 [2] 447).
- 22) 6-Oxy-3-Methyl- $\alpha\alpha$ -Diphenyläthen. Sd. 187°<sub>20</sub> (*B.* 36, 4001 *C.* 1904 [1] 174).
- 23) Methyläther d. 2-Oxy- $\alpha\alpha$ -Diphenyläthen. Sm. 35°; Sd. 166°<sub>14</sub> (*B.* 36, 4000 *C.* 1904 [1] 174).
- 24) Methyläther d. 4-Oxy- $\alpha\alpha$ -Diphenyläthen. Sm. 75° (*B.* 37, 4166 *C.* 1904 [2] 1643).
- 25) 2,4'-Dimethyldiphenylketon. Sd. 316—318° (*B.* 36, 2025 *C.* 1903 [2] 376).
- 26) 3,4'-Dimethyldiphenylketon. Sm. 82°; Sd. 328—330° (*B.* 36, 2027 *C.* 1903 [2] 376).
- 27) 4-Methyl-2-Phenyl-1,2-Dihydrobenzofuran. Sm. 57°; Sd. 184°<sub>19</sub> (*B.* 36, 4001 *C.* 1904 [1] 174).
- 28) 2,7-Dimethylxanthen. Sm. 165° (*C. r.* 136, 1569 *C.* 1903 [2] 384).
- $C_{15}H_{14}O_2$  \*12)  $\beta\beta$ -Diphenylpropionsäure. Sm. 147° (*Am.* 31, 651 *C.* 1904 [2] 446).
- 43) 3-Methoxyphenyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. Sd. 199—200°<sub>16</sub> (*Soc.* 83, 1134 *C.* 1903 [2] 1060).
- 44) Oxydimethyldiphenylketon ( $CH_3:CH_3:OH = 1:3:4$ ). Sm. 145—146° (*G.* 33 [2] 60 *C.* 1903 [2] 995).
- 45) Methyläther d.  $\gamma$ -Keto- $\alpha$ -[2-Oxy-1-Naphtyl]- $\alpha$ -Buten. Sm. 171° (*Bl.* [3] 29, 882 *C.* 1903 [2] 885).
- $C_{15}H_{14}O_3$  \*9) Dimethyläther d. 4,4'-Dioxydiphenylketon. Sm. 144° (*B.* 36, 654 *C.* 1903 [1] 768).
- \*29) Methylester d.  $\alpha$ -Oxydiphenylelessigsäure. Sm. 73° (*B.* 37, 2765 *C.* 1904 [2] 708).
- \*48) Dibenzylester d. Kohlensäure. Sm. 29° (*B.* 36, 159 *C.* 1903 [1] 502).
- 40) 1,3-Dioxy-2,4-Dimethylxanthen. Sm. 185—186° (*M.* 25, 326 *C.* 1904 [1] 1495).
- 50)  $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]akrylsäure. Fl. (*B.* 37, 4134 *C.* 1904 [2] 1736).
- 51) 2-Oxy-1-Methylbenzol-2-[2-Methylphenyl]äther-3-Carbonsäure. Sm. 115° (*Bl.* [3] 31, 267 *C.* 1904 [1] 1088).
- 52) 4-Oxy-1-Methylbenzol-4-[4-Methylphenyl]äther-3-Carbonsäure. Sm. 113—114° (*C. r.* 136, 1569 *C.* 1903 [2] 1088).

- $C_{15}H_{14}O_3$  53) Aldehyd d. 3,4-Dioxybenzol-3-Methyläther-4-Benzyläther-1-Carbonsäure. Sm. 63—64° (D.R.P. 65 937). — \*III, 75.  
 54) 2-Methylphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 38° (D.R.P. 46 756). — \*II, 919.  
 55) 2-Methylphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 34° (D.R.P. 46 756). — \*II, 920.  
 56) 2-Methylphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 48° (D.R.P. 46 756). — \*II, 922.  
 57) 3-Methylphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 57° (D.R.P. 46 756). — \*II, 919.  
 58) 3-Methylphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 63° (D.R.P. 46 756). — \*II, 920.  
 59) 3-Methylphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 68° (D.R.P. 46 756). — \*II, 922.  
 60) 4-Methylphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 29° (D.R.P. 46 756). — \*II, 919.  
 61) 4-Methylphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 74—75° (D.R.P. 46 756). — \*II, 920.  
 62) 4-Methylphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 79° (D.R.P. 46 756). — \*II, 922.
- $C_{15}H_{14}O_4$  25) Methylenäther d. *s*-Keto-*o*-Acetyl- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Hexadien. Sm. 105° (B. 37, 1700 C. 1904 [1] 1497).  
 26) Äthylester d. 3-Acetoxylnaphtalin-2-Carbonsäure. Sm. 82—83° (Z. Kr. 29, 285). — \*II, 989.  
 27) 2-Methoxyphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 60—61° (D.R.P. 57 941). — \*II, 919.  
 28) 2-Methoxyphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 61—62° (D.R.P. 57 941). — \*II, 920.  
 29) 2-Methoxyphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 86° (D.R.P. 57 941). — \*II, 922.  
 30) Benzoat d. 1,2,3-Trioxybenzol-1,2-Dimethyläther. Sm. 55—57° (M. 25, 515 C. 1904 [2] 1118).
- $C_{15}H_{14}O_6$  \*8) Acakatechin (C. 1904 [2] 439).  
 \*9) Katechin b + 4H<sub>2</sub>O. Sm. 96° (210° wasserfrei) (C. 1903 [1] 883; B. 36, 101 C. 1903 [1] 397).  
 11) Cyanomaklurin. Zers. bei 250° (Soc. 67, 939; Soc. 81, 1173 C. 1902 [2] 199; C. 1904 [2] 438). — III, 684.  
 12) Decocacetin. Sm. 238° (J. pr. [2] 66, 412 C. 1903 [1] 527).
- $C_{15}H_{14}N_2$  \*24) Nitril d.  $\alpha$ -[4-Methylphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 109° (B. 37, 4079 C. 1904 [2] 1722).  
 \*25) Nitril d. Dibenzylamidoameisensäure. Sm. 54° (B. 36, 1199 C. 1903 [1] 1215).  
 \*27) Nitril d.  $\alpha$ -Methylphenylamido- $\alpha$ -Phenylelessigsäure. Sm. 63—64° (B. 37, 4085 C. 1904 [2] 1723).  
 30)  $\alpha$ -Phenylamido- $\gamma$ -Phenylimidopropen. Sm. 115°. HCl (B. 36, 3667 C. 1903 [2] 1312).  
 31) 2-Amido-3,7-Dimethylakridin. Sm. 244°. HCl (B. 36, 1025 C. 1903 [1] 1268; Soc. 85, 531 C. 1904 [1] 1525).  
 32) Nitril d. Phenylbenzylamidoessigsäure. Fl. (B. 37, 4083 C. 1904 [2] 1723).
- $C_{15}H_{14}Br_2$  3)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenylpropan. Sm. 134—135° (127° u. Zers.) (B. 37, 458 C. 1904 [1] 949; B. 36, 1496 C. 1903 [1] 1351; B. 37, 458 C. 1904 [1] 949; B. 37, 1134 C. 1904 [1] 1256).  
 4)  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthan. Sm. 185° (B. 35, 3967 C. 1903 [1] 31).
- $C_{15}H_{16}N$  20) 4-Aethylbenzylidenamidobenzol. Sm. 2—3°; Sd. 208—210°<sub>20</sub> (C. r. 136, 558 C. 1903 [1] 832).  
 21)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthen. Sm. 144—145°. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 36, 1684 C. 1903 [2] 46).  
 22) 3,7-Dimethyl-5,10-Dihydroakridin. Sm. 218—220° (B. 36, 1019 C. 1903 [1] 1268).
- $C_{15}H_{16}N_8$  \*15) 2,8-Diamido-3,7-Dimethylakridin. Sm. oberh. 300°. HCl (D.R.P. 52324; B. 36, 589 C. 1903 [1] 724).

- $C_{15}H_{15}N_3$  16) 2-[2-Amidobenzyliden]amido-1-Methylimidomethylbenzol. Sm. 189 bis 190°. 2HCl (*B.* 37, 3653 *C.* 1904 [2] 1514).
- $C_{15}H_{16}O$  \*23)  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylpropan. Sm. 92° (94—95°); Sd. 170—172°<sub>14</sub> (*C. r.* 138, 154 *C.* 1904 [1] 577; *B.* 37, 231 *C.* 1904 [1] 660).
- 24)  $\beta$ -Oxy- $\alpha\beta$ -Diphenylpropan. Sm. 50—51°; Sd. 175°<sub>16</sub> (*B.* 37, 457 *C.* 1904 [1] 949).
- 25) Methyläther d. 2-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm. 26°; Sd. 160—161°<sub>11</sub> (*B.* 36, 4008 *C.* 1904 [1] 175).
- 26) Phenyläther d.  $\gamma$ -Oxy- $\alpha$ -Phenylpropan. Sd. 171—172°<sub>11</sub> (*C. r.* 138, 1049 *C.* 1904 [1] 1493).
- $C_{15}H_{16}O_2$  \*12) Dibenzyläther d. Dioxymethan. Sd. 280° u. ger. Zers. (*Bl.* [3] 27, 1217 *C.* 1903 [1] 225).
- 21) 2-Methyläther d.  $\alpha$ , 2-Dioxy- $\alpha\alpha$ -Diphenyläthan. Sm. 75,5°; Sd. 285 bis 287° (*B.* 36, 4002 *C.* 1904 [1] 174).
- $C_{15}H_{16}O_3$  12) 4, 4'-Dimethyläther d.  $\alpha$ -Oxydi[4-Oxyphenyl]methan. Sm. 72° (*B.* 36, 655 *C.* 1903 [1] 768).
- 13) Artemisinsäure. Sm. 135—136°. Ba (*C.* 1903 [2] 1377).
- 14) Aethylester d. 3-Oxynaphtalinäthyläther-2-Carbonsäure. Sm. 60° (*Z. Kr.* 29, 285). — \*II, 989.
- 15) Verbindung (aus p-Anisol). HCl (*B.* 36, 650 *C.* 1903 [1] 768).
- $C_{15}H_{16}O_4$  \*1) Di[4, 6-Dioxy-2-Methylphenyl]methan (*A.* 329, 302 *C.* 1904 [1] 793).
- $C_{15}H_{16}O_5$  9)  $\gamma$ -Oxy- $\beta\epsilon$ -Diketo- $\gamma$ -Benzoyl- $\delta$ -Acetylhexan. Sm. 103° (*B.* 36, 3220 *C.* 1903 [2] 941).
- $C_{15}H_{16}O_6$  9) Methylenbismethylphloroglucin. Sm. 230° (*A.* 329, 279 *C.* 1904 [1] 796).
- 10) Dimethylester d. 1, 3, 5-Trimethylbenzol-2, 4-Di[Ketocarbonsäure]. Sm. 103,5—104°. — \*II, 1174.
- $C_{15}H_{16}N_2$  \*8) 1- $\alpha$ -Phenylimido- $\alpha$ -Dimethylamidomethylbenzol. Sm. 72° (*B.* 37, 2680 *C.* 1904 [2] 521).
- \*17)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Methylphenyl]äthan. Sm. 94—95° (*B.* 35, 1877 *C.* 1903 [2] 287).
- 32)  $\alpha$ -Aethylimido- $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan. Sm. 74—76°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*Soc.* 83, 321 *C.* 1903 [1] 580, 876).
- $C_{15}H_{16}N_4$  \*1)  $\alpha\beta$ -Di[Phenylhydrazon]propan. Sm. 150—154° (*A.* 335, 254 *C.* 1904 [2] 1283).
- 12)  $\beta$ -[4-Methylphenyl]azomethylen- $\alpha$ -[4-Methylphenyl]hydrazin (Dip-Tolylformazylwasserstoff). Sm. 105° (*B.* 36, 1373 *C.* 1903 [1] 1343).
- $C_{15}H_{18}J_2$  2) 2-Methyl-4-Äthylidiphenyljodoniumjodid. Sm. 139° (*A.* 327, 294 *C.* 1903 [2] 352).
- $C_{15}H_{17}N$  \*6) Aethylphenylbenzylamin. Sd. 275—298°. Pikrat (*A.* 334, 236 *C.* 1904 [2] 900).
- \*8) Methylbenzyl-2-Methylphenylamin. Sd. 167°<sub>13</sub>. Pikrat (*B.* 37, 3898 *C.* 1904 [2] 1612).
- $C_{15}H_{17}N_3$  \*7) 4-Dimethylamidobenzylidenphenylhydrazin. Sm. 148° (*B.* 37, 859 *C.* 1904 [1] 1206).
- 18) 2-Dimethylamidobenzylidenphenylhydrazin. Sm. 74—74,5° (*B.* 37, 977 *C.* 1904 [1] 1079).
- 19) 4-Aethylamidobenzylidenphenylhydrazin. Sm. 178° (*B.* 37, 858 *C.* 1904 [1] 1206).
- 20) 4-Methylamido-3-Methylbenzylidenphenylhydrazin. Sm. 124° (*B.* 37, 863 *C.* 1904 [1] 1206).
- $C_{15}H_{18}O_2$  8) Methyläther d. 3-Keto-4-[4-Oxybenzyliden]-1-Methylhexahydrobenzol. Sm. 97° (*C. r.* 136, 1225 *C.* 1903 [2] 116).
- $C_{15}H_{18}O_3$  \*5) Desmotroposantonin (*B.* 36, 2667 *C.* 1903 [2] 951).
- \*9) Santonid. Sm. 127° (*C.* 1903 [2] 1067).
- \*10) Parasantonid. Sm. 110° (*C.* 1903 [2] 1066).
- $C_{15}H_{18}O_4$  9) Dimethylester d.  $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure- $\gamma$ -Methylcarbonsäure. Sm. 70° (*B.* 36, 2339 *C.* 1903 [2] 438).
- $C_{15}H_{18}O_5$  11) Mekoninmethylpropylketon. Sm. 91—95° (*M.* 25, 1054 *C.* 1904 [2] 1644).
- 12) Mekoninmethyloisopropylketon. Sm. 88—91° (*M.* 25, 1055 *C.* 1904 [2] 1644).
- 13) Dehydrodioxyparasantonsäure. Sm. 187—188°. Ba + H<sub>2</sub>O, Ag<sub>2</sub> (*C.* 1903 [2] 1447).

- $C_{15}H_{18}O_8$  12) Diäthylester d. 3-Methoxyphenoxylfumarsäure. *Sd.* 206—207°<sub>12</sub> (*Soc.* 83, 1132 *C.* 1903 [2] 1059).
- $C_{15}H_{18}N_2$  \*19)  $\alpha\alpha$ -Di[Phenylamido]propan. *Fl.* (*A.* 328, 127 *C.* 1903 [2] 790).
- 23) 4,4'-Di-[Methylamidophenyl]methan. *Sm.* 56—57° (55°) (*D.R.P.* 68011; *B.* 37, 2675 *C.* 1904 [2] 443).
- 24) Di[3-Methylphenylamido]methan. *Sd.* 146°<sub>18</sub> (*B.* 36, 43 *C.* 1903 [1] 504).
- 25) Äthylbenzyl-4-Amidophenylamin. *Sd.* 225°<sub>11</sub>. Oxalat (*A.* 334, 262 *C.* 1904 [2] 902).
- 26) Nitril d.  $\alpha$ -Phenyl- $\gamma$ -[1-Piperidyl]propen- $\gamma$ -Carbonsäure. *Sm.* 98 bis 99° (*B.* 37, 4087 *C.* 1904 [2] 1724).
- $C_{15}H_{10}N$  2) N,4,7[oder N,6,7]-Trimethylcarbazolenin. *Pikrat* (*C.* 1904 [2] 343).
- $C_{16}H_{19}N_8$  8) Verbindung (aus d. Verb.  $C_{16}H_{19}N_4Cl$ ,  $HCl + 2H_2O$ ). *Sm.* 118° (*B.* 37, 554 *C.* 1904 [1] 893).
- $C_{15}H_{20}O_2$  9) Benzot d.  $\beta$ -Oxy- $\gamma$ -Methyl- $\alpha$ -oder- $\beta$ -Hepten. *Sd.* 197—200°<sub>50</sub> (*Soc.* 83, 151 *C.* 1903 [1] 72, 436).
- $C_{15}H_{20}O_3$  \*9) i-Santonigesäure (*B.* 36, 2668 *C.* 1903 [2] 951).
- $C_{15}H_{20}O_4$  \*4) Santonsäure (*B.* 37, 258 *C.* 1904 [1] 642).
- \*5) Isosantonsäure. *Sm.* 152° (*C.* 1903 [2] 1067).
- \*7) Parasantonsäure. *Sm.* 170° (*C.* 1903 [2] 1067, 1446).
- 29) l-Desmotroposantoninsäure. *Ba* (*R. A. L.* [5] 7 II, 322. — \*II, 1046).
- $C_{15}H_{20}O_5$  11) Oxyparasantonsäure. *Sm.* 189—190°. *Ba* (*C.* 1903 [2] 1377).
- $C_{15}H_{20}O_6$  8) Dioxyparasantonsäure. *Sm.* 206—207° (*C.* 1903 [2] 1447).
- $C_{15}H_{22}O_2$  13) Methylenäther d.  $\alpha\gamma$ -Dioxy- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylpropen. *Sd.* 154—157°<sub>10</sub> (*M.* 24, 258 *C.* 1903 [2] 243).
- $C_{15}H_{22}O_3$  \*14) Methylester d. Allylcamphocarbonsäure. *Sm.* 75—76° (*C. r.* 136, 791 *C.* 1903 [1] 1086).
- 15) Acetat d. 9-Methyl-3-Isopropenylbicyclo-[1,3,3]-Nonan-5-ol-7-on. *Sd.* 178—182°<sub>15</sub> (*B.* 36, 230 *C.* 1903 [1] 514).
- $C_{15}H_{22}O_4$  9) Äthylester d.  $\beta\beta$ -Dioxy- $\beta$ -Phenylpropiondiäthyläthersäure. *Sd.* 153°<sub>13</sub> (*C. r.* 138, 207 *C.* 1904 [1] 659).
- $C_{15}H_{22}O_5$  9) Santolsäure. *Sm.* 166—167°. *Ba + H\_2O*, *Ag* (*G.* 33 [1] 202 *C.* 1903 [1] 45).
- $C_{15}H_{22}O_7$  \*3) Glyko-o-Oxyphenyläthylcarbinol. *Sm.* 145—150° u. Zers. (*B.* 36, 2582 *C.* 1903 [2] 621).
- $C_{15}H_{22}O_8$  \*4) Tetraäthylester d. R-Trimethylen-1,1,2,2-Tetracarbonsäure. *Sm.* 43°; *Sd.* 158—160°<sub>14</sub> (*J. pr.* [2] 68, 167 *C.* 1903 [2] 760).
- $C_{15}H_{24}O_9$  2)  $\alpha\beta\gamma$ -Trimethylester- $\delta\delta$ -Diäthylester d.  $\epsilon$ -Ketohehexan- $\alpha\beta\gamma\delta\delta$ -Pentacarbonsäure. *Sm.* 102° (*B.* 36, 3296 *C.* 1903 [2] 1167).
- $C_{15}H_{22}O_{10}$  \*2) Tetraacetat d.  $\beta$ -Methyl-d-Glykosid (*C.* 1903 [1] 1369).
- 5) Saponin (*Ar.* 241, 615 *C.* 1904 [1] 169).
- $C_{15}H_{23}N$  5) d-2-Propyl-1-Benzylhexahydropyridin (N-Benzylconiin). *Sd.* 294 bis 296° (*B.* 37, 3633 *C.* 1904 [2] 1510).
- $C_{15}H_{24}O$  23) sec. Amylidencampher. *Sd.* 253—260°<sub>750</sub> (*B.* 36, 2631 *C.* 1903 [2] 625).
- 24) Äthylpseudojonon (*D.R.P.* 150771 *C.* 1904 [1] 1307).
- 25) Coleresen =  $(C_{15}H_{24}O)_x$ . *Sm.* 75—77° (*Ar.* 242, 351 *C.* 1904 [2] 526).
- 26) Taceleresen =  $(C_{15}H_{24}O)_x$ . *Sm.* 75° (*Ar.* 242, 363 *C.* 1904 [2] 527).
- $C_{15}H_{24}O_2$  4) Isovalerylcampher. *Sd.* 141—148°<sub>11</sub> (*B.* 37, 762 *C.* 1904 [1] 1085).
- $C_{15}H_{24}O_3$  10) Barringtonenin. *Sm.* 179—180° (*C.* 1903 [2] 841).
- 11) Methylester d. Propylcamphocarbonsäure. *Sm.* 69—70° (*C. r.* 136, 790 *C.* 1903 [1] 1085).
- 12) Methylester d. isom. Propylcamphocarbonsäure. *Sm.* 30° (*C. r.* 136, 790 *C.* 1903 [1] 1085).
- 13) Isobutylester d. Camphocarbonsäure. *Sd.* 177°<sub>19</sub> (*C. r.* 136, 240 *C.* 1903 [1] 584).
- 14) d-Bornylester d.  $\beta$ -Acetylpropionsäure. *Sd.* 170—171°<sub>20-25</sub> (*P. Ch. S.* No. 230). — III, 333.
- $C_{15}H_{24}O_4$  5) Säure (aus Vetiveröl). *Ag*<sub>2</sub> (*C. r.* 135, 1060 *C.* 1903 [1] 234).
- 6) Verbindung (aus Hopfenbitter). *Sm.* 92,5 (*C.* 1904 [2] 1227).
- $C_{15}H_{24}O_5$  2) Dimethylester d. Pulegonmalonsäure. *Sm.* 49; *Sd.* 187°<sub>15</sub> (*B.* 33, 3186 *Ann.*). — III, 333.
- $C_{15}H_{24}Br_2$  1) Atractylendibromid. *Fl.* (*Ar.* 241, 36 *C.* 1903 [1] 712).
- $C_{15}H_{25}O$  1)  $\beta$ -Tacroresen. *Sm.* 82° (*Ar.* 242, 398 *C.* 1904 [2] 528).
- $C_{15}H_{25}O_2$  1) Tacamaholsäure. *Sm.* 104—106° (*Ar.* 242, 397 *C.* 1904 [2] 528).

- $C_{15}H_{26}Cl$  \*2) Chlorid d. Caryophyllenhydrat. Sm. 64°; Sd. 295° (B. 36, 1038 C. 1903 [1] 1135).
- $C_{15}H_{26}J$  3) Atractyljodid. Fl. (Ar. 241, 29 C. 1903 [1] 712).  
4) Guajyljodid (Ar. 241, 43 C. 1903 [1] 713).
- $C_{15}H_{26}O$  \*7) Guaöl. Sm. 91° (Ar. 241, 42 C. 1903 [1] 713).  
\*9) Patschoulialkohol. Sm. 56°; Sd. 266–271° (Ar. 241, 39 C. 1903 [1] 712).  
20) Atractylol. Sm. 59°; Sd. 290–292°<sub>700</sub> (Ar. 241, 23 C. 1903 [1] 712).  
21) Farnesol. Sd. 160°<sub>10</sub> (D.R.P. 149603 C. 1904 [1] 975; B. 37, 1095 C. 1904 [1] 1065).  
22) Galipol. Sd. 264–265° (Ar. 235, 526; 236, 392, 408). — \*III, 386.  
23) Gurjuresinol. Sm. 131–132° (Ar. 241, 385 C. 1903 [2] 724).  
24) Matikocampher. Sm. 94° (B. 16, 284 C. 1904 [2] 1125). — III, 513.  
25) d-Nerolidol. Sd. 276–277° (J. pr. [2] 66, 503 C. 1903 [1] 517). — \*III, 387.  
26) Vetivenol. Sd. 169–170°<sub>15</sub> (C. r. 135, 1060 C. 1903 [1] 234).  
27) Sesquiterpenalkohol (aus Copaivabalsam). Sm. 113,5–115° (C. 1904 [2] 1223; Ar. 242, 542 C. 1904 [2] 1500).  
28) Sesquiterpenalkohol (aus Eucalyptusöl). Sd. 247–248°<sub>714</sub> (C. 1904 [1] 1264).
- $C_{15}H_{26}O_2$  12)  $\alpha$ -Oxy- $\alpha$ -Methylbutylcampher. Fl. (B. 36, 2631 C. 1903 [2] 625).  
13) Aethylpseudojononhydrat. Sd. 198–205° (D.R.P. 150771 C. 1904 [1] 1307).  
14) l-Menthylester d.  $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sd. 152–153,5°<sub>14</sub> (A. 327, 173 C. 1903 [1] 1396).  
15) l-Menthylester d.  $\alpha$ -Buten- $\delta$ -Carbonsäure. Sd. 139–140°<sub>11</sub> (A. 327, 174 C. 1903 [1] 1396).  
16) l-Menthylester d.  $\beta$ -Buten- $\alpha$ -Carbonsäure. Sd. 143–144,5°<sub>14</sub> (A. 327, 173 C. 1903 [1] 1396).  
17) l-Menthylester d. R-Tetramethylenearbonsäure. Sd. 148°<sub>11</sub> (A. 327, 183 C. 1903 [1] 1396).  
18) Valerianat d. Cyklogeraniol. Sd. 145–155°<sub>20</sub> (D.R.P. 138141 C. 1903 [1] 267).  
19) Valerianat d. Isoborneol. Sd. 136°<sub>12</sub> (C. r. 136, 239 C. 1903 [1] 584).
- $C_{15}H_{26}O_3$  \*16) Tributyrat d.  $\alpha\beta\gamma$ -Trioxypropan (C. 1903 [1] 134).  
23) Triäthylester d.  $\beta$ -Methylpentan- $\beta\gamma\delta$ -Tricarbonsäure. Sd. 195°<sub>10</sub> (Soc. 85, 136 C. 1904 [1] 727).  
24) Triäthylester d.  $\beta$ -Methylpentan- $\delta\epsilon\zeta$ -Tricarbonsäure. Sd. 176–177°<sub>10</sub> (Am. 30, 239 C. 1903 [2] 934).  
25) Triäthylester d. Säure  $C_9H_{14}O_6$ . Sd. 195–205°<sub>10</sub> (H. [3] 29, 1045 C. 1903 [2] 1424).  
26) Triacetat d.  $\delta\zeta\eta$ -Trioxy- $\beta\delta$ -Dimethylheptan (C. 1904 [2] 185).  
27) Triisobutytrat d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 282–284° (C. 1903 [1] 134).
- $C_{15}H_{26}N_2$  \*1) Spartein (Lupinidin). Sd. 325°<sub>754</sub>. (2HCl, PtCl<sub>4</sub> · 2H<sub>2</sub>O), (2HCl, AuCl<sub>3</sub>), HJ, 2HJ, 2H<sub>2</sub>SO<sub>4</sub>, Pikrat (C. r. 137, 194 C. 1903 [2] 671; B. [3] 29, 1135 C. 1904 [1] 293; C. 1904 [1] 731; B. 37, 2354 C. 1904 [2] 455; B. 37, 2429 C. 1904 [2] 442; Ar. 242, 412 C. 1904 [2] 782; B. 37, 3238 C. 1904 [2] 1154).
- $C_{15}H_{26}Cl_2$  6) Atractylendihydrochlorid. Fl. (Ar. 241, 28 C. 1903 [1] 712).  
7) Guajendihydrochlorid. Fl. (Ar. 241, 44 C. 1903 [1] 713).  
8) d-Cadinendihydrochlorid. Sm. 117–118° (C. r. 135, 1058 C. 1903 [1] 233).  
9) Sesquiterpendihydrochlorid (aus Copaivabalsam). Sm. 116–117° (Ar. 242, 546 C. 1904 [2] 1500).
- $C_{15}H_{26}Br_2$  2) Atractylendihydrobromid. Fl. (Ar. 241, 28 C. 1903 [1] 712).
- $C_{15}H_{26}J_2$  2) Patschoulendihydrojodid. Fl. (Ar. 241, 40 C. 1903 [1] 712).
- $C_{15}H_{27}Cl_3$  1) Sesquiterpentrihydrochlorid. Sm. 79–80° (Soc. 85, 416 C. 1904 [1] 1443).
- $C_{15}H_{28}O$  2) Isocamylmenthon. Sd. 138–143°<sub>10</sub> (C. r. 138, 1140 C. 1904 [2] 106).
- $C_{15}H_{28}O_2$  8) Valerianat d. l-Menthol. Sd. 141°<sub>16</sub> (D.R.P. 80711; B. 31, 364). — \*III, 333.
- $C_{15}H_{28}O_4$  \*2) Dimethylester d. Brassylsäure. Sm. 36°; Sd. 326° (C. 34 [2] 54 C. 1904 [2] 693).
- $C_{15}H_{28}N_2$  \*1) Dihydrosparteïn (C. r. 137, 196 C. 1903 [2] 671).

- $C_{15}H_{30}O$  6) *o*-Keto- $\eta$ -Methyltetradekan. *Sd.* 143—144° (*Bz.* [3] 31, 1159 *C.* 1904 [2] 1708).
- 7) Aldehyd d. Tetradekan- $\alpha$ -Carbonsäure. *Sd.* 185°<sub>25</sub> (*C. r.* 138, 699 *C.* 1904 [1] 1066).
- $C_{15}H_{30}O_2$  13) Säure (aus Hefefett). *Sm.* 56° (*H.* 38, 5 *C.* 1903 [1] 1428).
- $C_{15}H_{30}O_4$  C 65,7 — H 11,9 — O 23,3 — M. G. 274.
- 1)  $\alpha$ -Laurinat d.  $\alpha\beta\gamma$ -Trioxypropan. *Sm.* 59°; *Sd.* 142° (*B.* 36, 4341 *C.* 1904 [1] 434).
- $C_{15}H_{30}Br_2$  2) Spilanthendibromid. *Fl.* (*Ar.* 241, 279 *C.* 1903 [2] 451).
- $C_{15}H_{32}O_2$  2) Diamyläther d.  $\alpha\delta$ -Dioxy-pentan. *Sd.* 276—277° (*C. r.* 138, 977 *C.* 1904 [1] 1401; *C. r.* 138, 1610 *C.* 1904 [2] 429).
- $C_{16}H_{32}O_4$  4)  $\delta$ -Oxy- $\beta\delta$ -Dimethyl- $\delta$ -Isobutylundekan. *Sd.* 126—129°<sub>15</sub> (*C. r.* 138, 154 *C.* 1904 [1] 577).
- $C_{15}H_{33}N$  \*2) Triisamylamin. Salze siehe (*C. r.* 135, 903 *C.* 1903 [1] 132).

## — 15 III —

- $C_{15}H_8O_6Br_8$  1) Acetat d. Verbindung  $C_{15}H_4O_5Br_8$ . *Sm.* 249° (*B.* 36, 455 *C.* 1903 [1] 574; *Ann.* 31, 100 *C.* 1904 [1] 802).
- $C_{15}H_8O_8Br_4$  \*2) Tetrabromyricetin (*Sox.* 85, 62 *C.* 1904 [1] 381, 729).
- $C_{15}H_8O_2N_2$  C 72,6 — H 3,2 — O 12,9 — N 11,3 — M. G. 248.
- 1) Laktone d. 3-Oxy-2-Phenyl-1,4-Benzdiazin-2'-Carbonsäure. *Sm.* 201—203° (*G.* 34 [1] 498 *C.* 1904 [2] 458).
- $C_{15}H_8O_4Cl_2$  2) 5,6-Dioxy-2-Keto-1-[ $\beta$ -Dichlorbenzyliden]-1,2-Dihydrobenzofuran. *Sm.* 210° u. Zers. (*B.* 29, 2434). — \*III, 532.
- $C_{15}H_8O_4Br_6$  1)  $\alpha$ -Acetat d. 2,3,5,2',3',5'-Hexabrom- $\alpha$ ,4,4'-Trioxydiphenylmethan. *Sm.* 208° (u. 225—226°) (*A.* 330, 79 *C.* 1904 [1] 1148).
- $C_{15}H_9ON_3$  2) Verbindung (aus d. Laktone  $C_{15}H_8O_2N_2$ ). *Sm.* 266°. (2HCl, PtCl<sub>4</sub>) (*G.* 34 [1] 499 *C.* 1904 [2] 458).
- $C_{15}H_9O_3N$  \*1) 1-Benzoyl-2,3-Diketo-2,3-Dihydroindol. *Sm.* 206° (*B.* 36, 2764 *C.* 1903 [2] 835).
- $C_{15}H_9O_4N$  16) Benzoesäure d. 1,2-Phthalylhydroxylamin (*C.* 1899 [2] 245). — \*II, 1058.
- $C_{15}H_9O_4Cl$  1) 2-Keto-5,6-Dioxy-1-[2-Chlorbenzyliden]-1,2-Dihydrobenzofuran. *Sm.* 253° (*B.* 37, 825 *C.* 1904 [1] 1152).
- $C_{15}H_9O_5N$  3)  $\alpha\beta\gamma$ -Triketo- $\alpha$ -Phenyl- $\gamma$ -[4-Nitrophenyl]propan. *Sm.* 98—99° (*B.* 37, 1532 *C.* 1904 [1] 1609).
- $C_{15}H_9O_5N_3$  C 57,9 — H 2,9 — O 25,7 — N 13,5 — M. G. 311.
- 1) 4-Nitro-5-Phenyl-3-[4-Nitrophenyl]isoxazol. *Sm.* 199° (*A.* 328, 224 *C.* 1903 [2] 998).
- $C_{15}H_9O_6N$  2) 2-Methyläther d. 4-Nitro-1,2-Dioxy-9,10-Anthrachinon. *Sm.* 280 bis 282° (*D.R.P.* 150322 *C.* 1904 [1] 1043).
- 3) 2-Keto-5,6-Dioxy-1-[2-Nitrobenzyliden]-1,2-Dihydrobenzofuran. *Sm.* 278° (*B.* 37, 824 *C.* 1904 [1] 1152).
- 4) 2-Keto-5,6-Dioxy-1-[3-Nitrobenzyliden]-1,2-Dihydrobenzofuran. *Sm.* 274° (219—221°) (*B.* 29, 2434; *B.* 37, 824 *C.* 1904 [1] 1151). — \*III, 532.
- 5) 2-Keto-5,6-Dioxy-1-[4-Nitrobenzyliden]-1,2-Dihydrobenzofuran. *Sm.* noch nicht bei 360° (*B.* 37, 823 *C.* 1904 [1] 1151).
- $C_{15}H_9O_7N_3$  C 52,5 — H 2,6 — O 32,6 — N 12,2 — M. G. 343.
- 1)  $\gamma$ -Keto- $\gamma$ -[3,5-Dinitrophenyl]- $\alpha$ -[3-Nitrophenyl]propen. *Sm.* 226° (*J. pr.* [2] 69, 470 *C.* 1904 [2] 596).
- $C_{15}H_9O_{14}N_7$  C 35,2 — H 1,8 — O 43,8 — N 19,2 — M. G. 511.
- 1) Äthyläther-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenyl-imidodioxymethan. *Sm.* 222° (*Sox.* 85, 651 *C.* 1904 [2] 310).
- $C_{15}H_{10}ON_4$  2)  $\delta$ -Di[3-Cyanphenyl]harnstoff. *Sm.* 198—199° (*C.* 1904 [2] 102).
- $C_{15}H_{10}O_2N_2$  20) Dibenzoyldiazomethan. *Sm.* 114° u. Zers. (*B.* 37, 2526 *C.* 1904 [2] 335).
- 21) 6-Phenylazo-1,2-Benzpyron. *Sm.* 158° (*B.* 37, 348 *C.* 1904 [1] 662).
- 22) 4,5-Diketo-1,3-Diphenyl-4,5-Dihydropyrazol. *Sm.* 165°. +  $C_6H_5O$ , + NaHSO<sub>3</sub> (*B.* 36, 1134 *C.* 1903 [1] 1253).
- $C_{15}H_{10}O_3N_2$  19) 3-[4-Nitrophenyl]-5-Phenylisoxazol. *Sm.* 221° (*B.* 37, 1151 *C.* 1904 [1] 1267).
- 20) 3-Oxy-2-Phenyl-1,4-Benzdiazin-2'-Carbonsäure. *Sm.* 232° u. Zers. NH<sub>4</sub>, Ba + 10H<sub>2</sub>O, *o*-Phenylendiaminsalz (*G.* 34 [1] 494 *C.* 1904 [2] 458).

- $C_{15}H_{10}O_3Br_2$  3) 1,2-Dibrom-2-Acetyl-3,4- $\beta$ -Naphtopyran. Sm. 213° (B. 36, 1974 C. 1903 [2] 377).
- $C_{15}H_{10}O_3Br_6$  2)  $\alpha$ -Aethyläther d. 2,3,5,2',3',5'-Hexabrom- $\alpha$ ,4,4'-Trioxydiphenylmethan. Sm. 189—190° (A. 330, 78 C. 1904 [1] 1148).
- $C_{15}H_{10}O_4N_2$  \*1) 2-Nitrobenzylimid d. Benzol-1,2-Dicarbonsäure (B. 36, 807 Anm. C. 1903 [1] 978).
- \*9) 4-Methylphenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 152 bis 153° (C. 1903 [2] 431).
- 11) 5-Nitro-1-Methylamido-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750).
- 12) 8-Nitro-1-Methylamido-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750).
- 13) 3-Nitro-4-Methylphenylimid d. Benzolcarbonsäure. Sm. 225° (D.R.P. 141893 C. 1903 [1] 1325).
- $C_{15}H_{10}O_4N_4$  C 58,1 — H 3,2 — O 20,6 — N 18,1 — M. G. 310.
- 1) 6-[4-Nitrophenylazo]amido-1,2-Benzpyron. Zers. 218—225° (Soc. 85, 1234 C. 1904 [2] 1124).
- $C_{15}H_{10}O_4Cl_4$  1)  $\alpha$ -Methyläther d.  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha$  $\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]-äthan. Sm. 155—156° (A. 325, 59 C. 1903 [1] 462).
- $C_{15}H_{10}O_5N_2$  4)  $\alpha$ -Nitro- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]propen. Sm. 164° (A. 328, 233 C. 1903 [2] 999).
- 5)  $\beta$ -Oximido- $\alpha$  $\gamma$ -Diketo- $\alpha$ -Phenyl- $\gamma$ -[4-Nitrophenyl]propan. Sm. 135° (B. 37, 1534 C. 1904 [1] 1609).
- $C_{15}H_{10}O_5N_4$  C 55,2 — H 3,1 — O 24,5 — N 17,2 — M. G. 326.
- 1) 5-Keto-1-Phenyl-3-[3,5-Dinitrophenyl]-4,5-Dihydropyrazol. Sm. 227° (J. pr. [2] 69, 464 C. 1904 [2] 595).
- $C_{15}H_{10}O_6S$  1) 1-Oxy-9,10-Anthrachinon-1-Methyläther-6-Sulfonsäure. Na (D.R.P. 145188 C. 1903 [2] 1037).
- 2) 1-Oxy-9,10-Anthrachinon-1-Methyläther-7-Sulfonsäure (D.R.P. 145188 C. 1903 [2] 1038).
- $C_{15}H_{11}ON$  41) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]akrylsäure. Sm. 104° (B. 37, 3165 C. 1904 [2] 983).
- $C_{15}H_{11}ON_3$  \*3) 3-Oxy-5,6-Diphenyl-1,2,4-Triazin. Sm. 223° (B. 36, 3190 C. 1903 [2] 939).
- \*7) Nitril d. Phenylazobenzoylessigsäure. Sm. 135—136° (B. 37, 2207 C. 1904 [2] 323).
- 10) 3-Benzylidenamido-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 129° (J. pr. [2] 69, 101 C. 1904 [1] 730).
- $C_{15}H_{11}OCl$  2) 1-Chlor-4-Methyl-2-Phenylbenzofuran. Sm. 66,5°; Sd. 194° (B. 36, 4001 C. 1904 [1] 174).
- $C_{15}H_{11}O_2N$  \*26) 4-Oxy-1-Keto-3-Phenyl-1,2-Dihydroisochinolin. Sm. 255—257° (B. 37, 1689 C. 1904 [1] 1524).
- 31) 1-Methylamido-9,10-Anthrachinon. Sm. 167° (D.R.P. 144634 C. 1903 [2] 750; D.R.P. 156056 C. 1904 [2] 1631).
- 32) 2-Methylamido-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750).
- $C_{15}H_{11}O_2N_3$  20) 3-[4-Nitrophenyl]-5-Phenylpyrazol. Sm. oberh. 250° (B. 37, 1152 C. 1904 [1] 1267).
- 21) 4-Oximido-5-Keto-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 200° (B. 36, 1135 C. 1903 [1] 1254).
- 22) 2-[ $\beta$ -2-Nitrophenyläthenyl]benzimidazol. Sm. 215° (C. 1904 [1] 102).
- 23) 2-[ $\beta$ -3-Nitrophenyläthenyl]benzimidazol. Zers. bei 220°. HCl (C. 1904 [1] 103).
- 24) 2-[ $\beta$ -4-Nitrophenyläthenyl]benzimidazol. Sm. 269—270° u. Zers. (C. 1904 [1] 103).
- 25) 3-[2-Oxybenzyliden]amido-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 205° (J. pr. [2] 69, 101 C. 1904 [1] 730).
- 26) 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 164—165°. Na +  $3\frac{1}{2}H_2O$ , Ba +  $5H_2O$ , Cu +  $1\frac{1}{2}H_2O$  (B. 35, 4047 C. 1903 [1] 169).
- 27) Nitril d. 2-Keto-6-Oxy-4-[ $\beta$ -Phenyläthyl]-2,5-Dihydropyridin-3,5-Dicarbonsäure (Hydrachinonyldicarbonsäure)  $NH_4$  (C. 1903 [2] 714).
- 28) Benzoat d. 5-Oxy-1-Phenyl-1,2,3-Triazol. Sm. 141—142° (A. 335, 83 C. 1904 [2] 1231).
- 29) s-Phenyl-3-Cyanphenylamid d. Oxalsäure. Sm. 205—206° (C. 1904 [2] 102).

- $C_{15}H_{11}O_2Br_3$  2) Acetat d. 3,5,4'-Tribrom-4-Oxydiphenylmethan. Sm. 105° (A. 334, 376 C. 1904 [2] 1051).
- $C_{15}H_{11}O_3N$  \*2)  $\beta$ -Oximido- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan. Sm. 143—144° (B. 37, 1531 C. 1904 [1] 1608).
- \*18)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]propen. Sm. 162,5° (B. 37, 1149 C. 1904 [1] 1267).
- 21)  $\beta$ -Nitro- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen. Sm. 90° (A. 328, 236 C. 1903 [2] 999).
- 22)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[3-Nitrophenyl]propen. Sm. 145° (Soc. 83, 1377 C. 1904 [1] 164, 450).
- 23) 4-Methylamido-1-Oxy-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750; D.R.P. 154353 C. 1904 [2] 1013).
- 24) 3-Oximido-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 158—159° u. Zers. (B. 37, 2819 C. 1904 [2] 712).
- 25) Benzoat d. 3-Oxy-2-Keto-2,3-Dihydroindol. Sm. 134° (B. 37, 947 C. 1904 [1] 1217).
- 26) 4-Methoxyphenylimid d. Benzol-1,2-Dicarbonsäure (2 isom. Formen). Sm. 162° (B. 36, 1000 C. 1903 [1] 1131).
- $C_{15}H_{11}O_3Br$  3) p-Brom-8-Oxy-5,7-Dimethylfluoron. Zers. bei 170—180° (M. 25, 328 C. 1904 [1] 1495).
- $C_{15}H_{11}O_4N$  11) 4-Nitrodibenzoylmethan. Sm. 160° (B. 37, 1151 C. 1904 [1] 1267).
- 12) 2-Methyläther d. 4-Amido-1,2-Dioxy-9,10-Anthrachinon (D.R.P. 150322 C. 1904 [1] 1043).
- 13)  $\alpha$ -Oximido- $\beta$ -Keto- $\alpha\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure? Sm. 166° (B. 23, 1345). — \*II, 1098.
- 14)  $\alpha$ -Phenylimido-2-Carboxyphenylessigsäure. 2 Anilinsalz (D.R.P. 97241 C. 1898 [2] 524). — \*II, 1129.
- $C_{15}H_{11}O_4N_3$  4) Benzyläther d. Nitroisatinoxim. Sm. 234—235° (B. 35, 4337 C. 1903 [1] 293).
- 5) Nitril d. 2,6-Diketo-4-[3,4-Dioxyphenyl]-1,2,3,6-Tetrahydro-pyridin-3,4-Dimethyläther-3,5-Dicarbonsäure.  $NH_4 + 2\frac{1}{2}H_2O$  (C. 1904 [2] 903).
- $C_{15}H_{11}O_5N$  9) Aethylester d. 2,4,9-Triketo-2,3,4,9-Tetrahydro- $\beta\beta$ -Naphtindol-3-Carbonsäure. Sm. 275° u. Zers. Cu (E. Hoyer, Dissert., Berlin 1901).
- 10) Acetat d. 4-Nitro-4'-Oxydiphenylketon. Sm. 131° (B. 36, 3898 C. 1904 [1] 94).
- $C_{15}H_{11}O_5N$  5)  $\beta\beta$ -Dioxy- $\alpha\gamma$ -Diketo- $\alpha$ -Phenyl- $\gamma$ -[4-Nitrophenyl]propan. Sm. 100° (B. 37, 1533 C. 1904 [1] 1609).
- 6) Aldehyd d. 5-Nitro-3-Benzoyl-4-Methoxybenzol-1-Carbonsäure. Sm. 120—121° (B. 35, 4398 C. 1903 [1] 341).
- $C_{15}H_{11}O_5N_3$  2)  $\gamma$ -Oximido- $\beta$ -Nitro- $\alpha$ -Keto- $\gamma$ -[4-Nitrophenyl]- $\alpha$ -Phenylpropan. Sm. 136—137° u. Zers. +  $\frac{1}{2}C_6H_6$  (A. 328, 228 C. 1903 [2] 998).
- $C_{15}H_{11}N_2Cl$  3) Nitril d.  $\beta$ -Imido- $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylpropionsäure. Sm. 174° (J. pr. [2] 67, 388 C. 1903 [1] 1357).
- $C_{15}H_{12}ON_2$  41) 2-[4-Amidobenzyliden]-2,3-Dihydroindol (C. 1903 [1] 34).
- 42) 3-[4-Amidophenyl]-5-Phenylisoxazol. Sm. 155° (A. 328, 234 C. 1903 [2] 999).
- 43) 4-Keto-2-Benzyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 242° (J. pr. [2] 69, 20 C. 1904 [1] 640).
- $C_{15}H_{12}ON_4$  8) Verbindung (aus 4,5-Diketo-1,3-Diphenyl-4,5-Dihydropyrazol). Sm. 98—101° (B. 36, 1136 C. 1903 [1] 1254).
- $C_{15}H_{12}O_2N_2$  38) 5-Amido-1-Methylamido-9,10-Anthrachinon (B. 37, 72 C. 1904 [1] 666).
- 39) 8-Amido-1-Methylamido-9,10-Anthrachinon (B. 37, 72 C. 1904 [1] 666).
- 40) 4-Oxy-5-Keto-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 200—208° (B. 36, 1136 C. 1903 [1] 1254).
- 41) Benzyläther d. Isatinoxim. Sm. 168,5—169° (B. 35, 4336 C. 1903 [1] 293).
- 42) Azobenzol-4-Akrylsäure. Sm. 245° u. Zers. (C. r. 135, 1117 C. 1903 [1] 286).
- 43) Methylester d. 2-Phenylindazol-2'-Carbonsäure. Sm. 73° (Bl. [3] 31, 875 C. 1904 [2] 661).

- $C_{16}H_{12}O_2Br_2$  4) Dibromoxydimethyldiphenylketon ( $CH_3:CH_3:OH = 1:3:4$ ) (*G.* 33 [2] 64 *C.* 1903 [2] 996).
- 5) Acetat d. 4,4'-Dibrom- $\alpha$ -Oxydiphenylmethan. Sm. 70—72° (*Am.* 30, 456 *C.* 1904 [1] 377).
- 6) Acetat d. 3,5-Dibrom-4-Oxydiphenylmethan. Sm. 53° (*A.* 334, 375 *C.* 1904 [2] 1051).
- $C_{16}H_{12}O_2Br_4$  1) Dimethyläther d. 3,5,3',5'-Tetrabrom-4,4'-Dioxydiphenylmethan. Sm. 150—151° (*B.* 36, 1886 *C.* 1903 [2] 291).
- $C_{15}H_{12}O_3N_2$  \*) 1) s-Dibenzoylharnstoff. Sm. 208—209° (*B.* 36, 3220 *C.* 1903 [2] 1056).
- 14)  $\alpha$ -Amido- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]propen. Sm. 141° (*B.* 37, 1150 *C.* 1904 [1] 1267; *Soc.* 85, 1173 *C.* 1904 [2] 1216).
- 15)  $\alpha\gamma$ -Dioximido- $\beta$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 133,5° (*B.* 37, 1145 *C.* 1904 [1] 1266).
- 16) 4,4-Dioxy-5-Keto-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 82° (*B.* 36, 1134 *C.* 1903 [1] 1254).
- 17) 4-Oxyazobenzol-2-Akrylsäure. Sm. 168° (*B.* 37, 4128 *C.* 1904 [2] 1735).
- 18) 4-Oxyazobenzol-3-Akrylsäure. Sm. 206° u. Zers. (*B.* 37, 4126 *C.* 1904 [2] 1735).
- $C_{15}H_{12}O_3Br_2$  4)  $\alpha$ -Acetat d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan. Sm. 115° (*A.* 334, 382 *C.* 1904 [2] 1052).
- $C_{15}H_{12}O_4N_4$  3) 6-Nitro-2-Methyl-3-[4-Nitrophenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 188—191°. HCl, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Essigsulfons. Salz (*B.* 36, 3118 *C.* 1903 [2] 1132).
- $C_{15}H_{12}O_5N_2$  9) Nitrit d.  $\beta$ -Nitro- $\gamma$ -Keto- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropan. Fl. (*A.* 328, 236 *C.* 1903 [2] 999).
- $C_{15}H_{12}O_7N_2$  5) Dimethyläther d. 3,3'-Dinitro-4,4'-Dioxydiphenylketon. Sm. 205° (*G.* 34 [1] 384 *C.* 1904 [2] 111).
- $C_{15}H_{12}O_7N_6$  2) s-Di[3-Nitrophenylamidoformyl]harnstoff. Sm. 142° u. Zers. (*Soc.* 81, 1569 *C.* 1903 [1] 157).
- $C_{15}H_{12}O_{10}N_2$  C 47,4 — H 3,1 — O 42,1 — N 7,4 — M. G. 380.
- 1)  $\beta\beta$ -Di[P-Dinitro-4-Oxyphenyl]propan. Sm. 231—232° (*C.* 1904 [2] 1737).
- $C_{15}H_{12}NCl$  3) Chlor-1-Naphtylat d. Pyridin. + FeCl<sub>3</sub> (*J. pr.* [2] 69, 129 *C.* 1904 [1] 815).
- 4) Chlor-2-Naphtylat d. Pyridin. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (*J. pr.* [2] 69, 127 *C.* 1904 [1] 815).
- $C_{15}H_{12}NJ$  1) Jod-2-Naphtylat d. Pyridin. Sm. 201° (*J. pr.* [2] 69, 128 *C.* 1904 [1] 815).
- $C_{15}H_{12}N_2S_2$  2) 2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol-2,5-Sulfid. Sm. 205—206° u. Zers. (*J. pr.* [2] 67, 257 *C.* 1903 [1] 1265).
- $C_{15}H_{15}ON$  27)  $\alpha$ -Amido- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 97° (*Soc.* 85, 1181 *C.* 1904 [2] 1216; *Soc.* 85, 1323 *C.* 1904 [2] 1645).
- 28)  $\gamma$ -Keto- $\gamma$ -[4-Amidophenyl]- $\alpha$ -Phenylpropan. HCl (*B.* 37, 392 *C.* 1904 [1] 657).
- 29) Methyl-4-Benzylidenamidophenylketon. Sm. 96° (*B.* 37, 392 *C.* 1904 [1] 657).
- $C_{15}H_{15}ON_3$  32) 4-Amido-5-Phenyl-3-[4-Amidophenyl]isoxazol +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 118° (*A.* 328, 225 *C.* 1903 [2] 998).
- 33) Methyläther d. 5-Oxy-1,4-Diphenyl-1,2,3-Triazol. Sm. 126° (*A.* 335, 105 *C.* 1904 [2] 1232).
- 34) Amid d. Azobenzol-4-Akrylsäure. Sm. 228—229° (*C. r.* 135, 1117 *C.* 1903 [1] 286).
- $C_{15}H_{15}ON_5$  4) 2-[2-Semicarbazonomethylphenyl]indazol. Sm. 252—253° (*Bl.* [3] 31, 872 *C.* 1904 [2] 661).
- $C_{15}H_{13}OCl$  \*) 1)  $\gamma$ -Chlor- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 120° u. Zers. (*B.* 36, 1479 *C.* 1903 [1] 1349).
- 4) Methyläther d.  $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 71,5° (*B.* 37, 4165 *C.* 1904 [2] 1643).
- 5) Methyläther d. isom.  $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 50,5° (*B.* 37, 4166 *C.* 1904 [2] 1643).
- 6) Methyläther d.  $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]äthen. Sm. 59 bis 60° (*B.* 37, 4167 *C.* 1904 [2] 1643).

- $C_{15}H_{13}OCl$  7) Methyläther d. isom.  $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]äthen. Sm. 26—28°; Sd. 210—213° (B. 37, 4167 C. 1904 [2] 1643).
- $C_{15}H_{13}OBr$  5) Methyläther d.  $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 78,5° (B. 37, 4164 C. 1904 [2] 1643).
- 6) Methyläther d. isom.  $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 56,5° (B. 37, 4165 C. 1904 [2] 1643).
- 7) Methyläther d.  $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]äthen. Sm. 82,5° (B. 37, 4166 C. 1904 [2] 1643).
- 8) Methyläther d. isom.  $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]äthen. Sm. 52° (B. 37, 4166 C. 1904 [2] 1643).
- $C_{15}H_{13}O_2N$  \*6)  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha$ - $\gamma$ -Diphenylpropan. Sm. 126° (B. 36, 3018 C. 1903 [2] 1001).
- \*31) Benzoylamid d. Phenylelessigsäure. Sm. 129—130° (C. 1903 [2] 831).
- 42) Methyl-4-[2-Oxybenzyliden]amidophenylketon. Sm. 116° (B. 37, 395 C. 1904 [1] 657).
- 43) Methyl-4-[4-Oxybenzyliden]amidophenylketon. Sm. 209° (B. 37, 658 C. 1904 [1] 658).
- 44) Methyl-4-Benzoylamidophenylketon. Sm. 205° (C. 1903 [1] 832).
- 45) 2-Oxy-1-[ $\alpha$ -Amidofural]naphtalin. Sm. 115°. HCl (G. 33 [1] 13 C. 1903 [1] 925).
- 46) Methyläther d. 5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 98° (B. 37, 3110 C. 1904 [2] 994).
- 47) Äthyläther d. 5-Oxy-1-Phenylbenzoxazol. Sm. 64—66° (J. pr. [2] 70, 328 C. 1904 [2] 1541).
- 48) Aldehyd d. 2-Methylbenzoylamidobenzol-1-Carbonsäure. Sm. 78,5 bis 79° (B. 37, 983 C. 1904 [1] 1079).
- 49) Benzoat d.  $\gamma$ -Oxy- $\beta$ -[2-Pyridyl]propen. Sm. 60—61° (B. 37, 745 C. 1904 [1] 1090).
- 50) Benzoylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 112—113° (C. 1903 [2] 831).
- $C_{15}H_{13}O_2N_3$  24) Dibenzoylguanidin. Sm. 215° (Ar. 241, 478 C. 1903 [2] 989).
- 25) 2-[ $\alpha$ -Semicarbazonäthyl]- $\beta$ -Naphtofuran. Sm. 249° (B. 36, 2867 C. 1903 [2] 832).
- 26) 6-Cinnamylidenhydrazidopyridin-3-Carbonsäure. Sm. 263—264° (B. 36, 1114 C. 1903 [1] 1184).
- 27) 1-[2,4-Dimethylphenyl]-1,2,3-Benztriazol-5-Carbonsäure. Sm. 230° (A. 332, 91 C. 1904 [1] 1570).
- $C_{15}H_{13}O_3N$  \*13)  $\alpha$ -Benzoylamido- $\alpha$ -Phenylelessigsäure. Ba (B. 37, 2961 C. 1904 [2] 993).
- 37)  $\beta$ -Oximido- $\alpha$ - $\beta$ -Diphenylpropionsäure. Sm. 138—139°. Ag (J. pr. [2] 55, 316). — \*II, 1003.
- 38) Äthylester d. Naphtostyryl-N-Methylcarbonsäure. Sm. 86—87° (B. 35, 4221 C. 1903 [1] 166).
- 39) Phenylamid d. 2-Acetoxybenzol-1-Carbonsäure. Sm. 136—137° (B. 37, 3976 C. 1904 [2] 1605).
- $C_{15}H_{13}O_3N_3$  15) Di[Phenylamid] d. Oximidomalonsäure. 2 isom. Formen. Sm. 141°. K, Ag (Soc. 83, 34 C. 1903 [1] 73, 441).
- 16)  $\alpha$ -Phenylhydrazid d. Phenylimidoessigsäure - 2-Carbonsäure. Sm. 243° u. Zers. K, Ca + 8 1/2 H<sub>2</sub>O, Ba (A. 332, 232 C. 1904 [2] 38).
- $C_{15}H_{13}O_4N$  \*20) Äthyläther d. 2-Nitro-4'-Oxydiphenylketon. Sm. 115° (B. 36, 3891 C. 1904 [1] 93).
- \*21) Äthyläther d. 3-Nitro-4'-Oxydiphenylketon. Sm. 79—81° (B. 36, 3891 C. 1904 [1] 93).
- \*22) Äthyläther d. 4-Nitro-4'-Oxydiphenylketon. Sm. 112° (B. 36, 3896 C. 1904 [1] 93).
- 31) 2-[4-Oxy-3-Methoxybenzyliden]amidobenzol-1-Carbonsäure. Sm. 172—174° (B. 37, 596 C. 1904 [1] 881).
- 32) r- $\alpha$ -[Phenylamidoformoxyl]phenylelessigsäure. Sm. 146° (Bl. [3] 19, 775). — \*II, 923.
- 33) 4-Methoxyphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 180 bis 185° (B. 36, 998 C. 1903 [1] 1131).
- $C_{15}H_{13}O_4N_3$  \*23) Methyläther d. Benzoylimido-3-Nitrophenylamidooxymethan. Sm. 86—88° (Am. 32, 364 C. 1904 [2] 1507).

- $C_{15}H_{19}O_4N_3$  28) Methyläther d. Phenylamido-3-Nitrobenzoylimidooxymethan. Sm. 124° (C. 1904 [1] 1559).
- 29)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxybenzyliden]hydrazin. Sm. 165° (B. 37, 3930 C. 1904 [2] 1595).
- 30)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitro-4-Oxybenzyliden]hydrazin. Sm. 193 bis 194° (B. 37, 3933 C. 1904 [2] 1596).
- 31) s-Diphenylguanidin-2,2'-Dicarbonsäure +  $\frac{1}{2}H_2O$ . Sm. 201° u. Zers. (J. pr. [2] 69, 30 C. 1904 [1] 641).
- 32)  $\alpha$ -Phenyl- $\beta$ -[3-Nitrobenzyliden]hydrazidoessigsäure. Sm. 196 bis 197° (B. 36, 3883 C. 1904 [1] 26).
- 33) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxybenzyliden]hydrazin. Sm. 191° (B. 37, 3929 C. 1904 [2] 1595).
- 34) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[6-Nitro-2-Oxybenzyliden]hydrazin. Sm. 128° (B. 37, 3932 C. 1904 [2] 1596).
- 35) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[3-Nitro-4-Oxybenzyliden]hydrazin. Sm. 134—135° (B. 37, 3932 C. 1904 [2] 1596).
- 36) Di[Phenylamid] d. Nitromalonsäure. Sm. 141° (C. 1904 [1] 1555).
- $C_{15}H_{19}O_5N_3$  10) Acetyl-2',4'-Dinitro-4-Methyldiphenylamin. Sm. 141—142° (B. 36, 32 C. 1903 [1] 520).
- $C_{15}H_{18}O_6N$  8) 1-Methylester-3-[3-Oxyphenyl]ester d. 4-Oxybenzol-1-Carbonsäure-3-Amidoameisensäure. Sm. 161° (A. 325, 325 C. 1903 [1] 770).
- $C_{15}H_{18}O_6N_3$  7) 4,6-Dinitroäthylidiphenylamin-2-Carbonsäure. Sm. 150—151°. K (G. 33 [2] 329 C. 1904 [1] 278).
- 8) Acetat d. 4,6-Dinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 146—147° (B. 37, 2093 C. 1904 [2] 33).
- $C_{15}H_{18}O_6N_3$  \*2) 2,4,6-Trinitro-1-[4-Dimethylamidophenyl]imidomethylbenzol. Zers. bei 263°. + Nitrobenzol (B. 36, 960 C. 1903 [1] 969).
- $C_{15}H_{13}NS$  5) Äthyläther d. 5-Merkaptoakridin. Sm. 65°. (2HCl, PtCl<sub>4</sub>), Pikrat (J. pr. [2] 68, 76 C. 1903 [2] 445).
- $C_{15}H_{13}N_3S$  \*2) Benzyläther d.  $\alpha$ -Cyanimido- $\alpha$ -Phenylamido- $\alpha$ -Merkaptomethan. Sm. 182—183° (185—186°) (C. 1903 [2] 662; A. 331, 297 C. 1904 [2] 33).
- \*5) Methyläther d. 3-Merkapto-1,5-Diphenyl-1,2,4-Triazol. Sm. 103—104° (J. pr. [2] 67, 226 C. 1903 [1] 1261).
- 6) 5-Methyl-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 253° (J. pr. [2] 67, 252 C. 1903 [1] 1265).
- $C_{15}H_{14}ON_2$  \*41) Benzylidenhydrazid d. 1-Methylbenzol-2-Carbonsäure. Sm. 164° (J. pr. [2] 69, 370 C. 1904 [2] 534).
- \*42) Benzylidenhydrazid d. 1-Methylbenzol-3-Carbonsäure. Sm. 139° (J. pr. [2] 69, 371 C. 1904 [2] 534).
- \*43) Benzylidenhydrazid d. 1-Methylbenzol-4-Carbonsäure. Sm. 235° (J. pr. [2] 69, 371 C. 1904 [2] 534).
- 50)  $\alpha$ -Imido- $\alpha$ -Acetylphenylamido- $\alpha$ -Phenylmethan. Sm. 128—129° (C. 1903 [2] 831).
- 51)  $\alpha$ -Phenylimido- $\alpha$ -Acetylamido- $\alpha$ -Phenylmethan. Sm. 138—139° (C. 1903 [2] 831).
- 52) Carbonyl-4,4'-Diamido-3,3'-Dimethylbiphenyl (o-Tolidinharnstoff). Sm. 370—373° (M. 25, 386 C. 1904 [2] 320).
- 53) Methyläther d. 2-[2-Oxymethylphenyl]indazol (C. r. 137, 523 C. 1903 [2] 1061).
- 54) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -[4-Oxyphenyl]essigmethyläthersäure. Sm. 104—105° (B. 37, 4085 C. 1904 [2] 1723).
- $C_{15}H_{14}OCl_2$  1) Methyläther d.  $\alpha\beta$ -Dichlor- $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]äthan. Sm. 90° (B. 37, 4165 C. 1904 [2] 1643).
- $C_{15}H_{14}OBr_2$  \*1) Methyläther d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]äthan. Sm. 177° (A. 333, 270 C. 1904 [2] 1392).
- 2) Äthyläther d. 4,4'-Dibrom- $\alpha$ -Oxydiphenylmethan. Sd. 228°, (Am. 30, 461 C. 1904 [1] 377).
- $C_{15}H_{14}O_2N_2$  \*6) Di[Benzoylamido]methan. Sm. 218° (B. 37, 4097 C. 1904 [2] 1726).
- \*59) 2-Oxybenzylidenhydrazid d. 1-Methylbenzol-2-Carbonsäure. Sm. 166° (J. pr. [2] 69, 370 C. 1904 [2] 534).
- \*60) 2-Oxybenzylidenhydrazid d. 1-Methylbenzol-4-Carbonsäure. Sm. 197° (J. pr. [2] 69, 371 C. 1904 [2] 534).
- 74) Methyläther d.  $\alpha$ -Benzoylamido- $\alpha$ -Phenylimido- $\alpha$ -Oxymethan. Ag (C. 1904 [1] 1559).

- $C_{15}H_{11}O_2N_2$  75)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin. Sm. 182° (B. 36, 3974 C. 1904 [1] 163).  
 76)  $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazidoessigsäure. Sm. 165–166° (B. 36, 3883 C. 1904 [1] 26).  
 77) Methylester d. Phenylimidophenylamidoessigsäure. Sm. 65–66° (2 HCl, PtCl<sub>4</sub>) (Soc. 85, 991 C. 1904 [2] 831).  
 78) Acetat d. 2-Oxymethylazobenzol. Sm. 39–40° (C. r. 138, 1427 C. 1904 [2] 229; Bl. [3] 31, 868 C. 1904 [2] 661).  
 79) s-Phenyl-4-Methylphenylamid d. Oxalsäure. Sm. 206° (A. 332, 267 C. 1904 [2] 700).
- $C_{15}H_{14}O_2N_4$  13) Phenylhydrazid-Benzylidenhydrazid d. Oxalsäure. Sm. 249–250° (B. 37, 2426 C. 1904 [2] 341).
- $C_{15}H_{14}O_2Br_2$  1) 3,4-Methylenäther d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[3,4-Dioxyphenyl]-äthan. Sm. 188° (B. 37, 1432 C. 1904 [1] 1351).  
 2)  $\alpha$ -Aethyläther d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan. Sm. 85–86° (A. 334, 382 C. 1904 [2] 1052).
- $C_{15}H_{14}O_3N_2$  61) 3-Nitro-4'-Dimethylamidodiphenylketon. Sm. 173° (D.R.P. 42853). — \*III, 148.  
 62) Phenoxazinderivat (aus 2-Amido-3,5-Dioxy-1-Methylbenzol-5-Methyläther). Sm. 253° (256–260°). HCl, HBr (B. 30, 1107; J. pr. [2] 70, 366 C. 1904 [2] 1565). — \*II, 583.  
 63) 4-Oxyazobenzol-2-Propionsäure. Sm. 146° (B. 37, 4130 C. 1904 [2] 1735).  
 64) 4-Oxyazobenzol-3-Propionsäure. Sm. 130° (B. 37, 4129 C. 1904 [2] 1735).  
 65) 6-Oxyazobenzol-3-Propionsäure. Sm. 140–141° (B. 37, 4131 C. 1904 [2] 1735).  
 66) 3-Nitro-2,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 236° (G. 33 [2] 281 C. 1904 [1] 265).  
 67) 5-Nitro-2,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 200° (G. 33 [2] 281 C. 1904 [1] 265).  
 68) Benzoat d.  $\alpha\beta$ -Phenylnitrosamido- $\alpha$ -Oxyäthan. Fl. (A. 332, 210 C. 1904 [2] 211).  
 69) Methylester d. 2-Oxymethylazobenzol-2'-Carbonsäure (C. r. 138, 1277 C. 1904 [2] 120).  
 70) Phenylamid d. Phenylamidoformoxylessigsäure. Sm. 145–147° (Bl. [3] 29, 122 C. 1903 [1] 564).
- $C_{15}H_{14}O_3N_4$  \*7) s-Di[Phenylamidoformyl]harnstoff. Sm. 211° (C. 1904 [2] 29).  
 10) 4,4'-Di[Methylnitrosamidophenyl]keton. Sm. 228–229° (B. 37, 2677 C. 1904 [2] 444).  
 11) 5-Nitro-2-Acetylamido-1-Phenylhydrazonmethylbenzol. Sm. 229° (M. 24, 97 C. 1903 [1] 921).  
 12) 6-Nitro-3-Acetylamido-1-Phenylhydrazonmethylbenzol. Sm. 247° (M. 24, 6 C. 1903 [1] 775).  
 13) 3-Nitro-4-Acetylamido-1-Phenylhydrazonmethylbenzol. Sm. 209° (M. 24, 91 C. 1903 [1] 921).  
 14) Phenylnitrosamid d.  $\beta$ -Phenylureidoessigsäure. Sm. 131° u. Zers. (J. pr. [2] 70, 250 C. 1904 [2] 1463).
- $C_{15}H_{14}O_4N_2$  \*25) Di[Phenylamido]methan-2,2'-Dicarbonsäure. Sm. 150–158° u. Zers. (157°) (B. 36, 50 C. 1903 [1] 505; D.R.P. 138393 C. 1903 [1] 372).  
 29) 2'-Nitro-2,4-Dimethyldiphenylamin-4'-Carbonsäure. Sm. 213° (A. 332, 90 C. 1904 [1] 1570).  
 30) Di[Phenylamido]methan-3,3'-Dicarbonsäure. Sm. 119–129° (B. 36, 51 C. 1903 [1] 505).  
 31) Di[Phenylamido]methan-4,4'-Dicarbonsäure. Sm. 167–168° (B. 36, 52 C. 1903 [1] 505).  
 32) Aethylester d. Acetyldicyanbenzoylessigsäure. Sm. 111° (A. 332, 153 C. 1904 [2] 192).  
 33) 2-Phenylamidoformiat d. 2-Oximido-5-Oxy-1-Keto-1,2-Dihydrobenzol-5-Aethyläther (J. pr. [2] 70, 324 C. 1904 [2] 1541).
- $C_{15}H_{14}O_4S$  4) Benzylidenacetophenonhydrosulfonsäure.  $K + 2\frac{1}{2}H_2O$  (B. 37, 4049 C. 1904 [2] 1648).  
 5)  $\beta$ -Phenylsulfon- $\beta$ -Phenylpropionsäure. Sm. 173°. Ba (Am. 31, 174 C. 1904 [1] 876).

- $C_{15}H_{14}O_5N_2$  5) 1-Benzoylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 231 bis 232° u. Zers.  $K + \frac{1}{2}H_2O$  (B. 35, 4319 C. 1903 [1] 336).  
 6) Dimethylester d.  $\alpha\gamma$ -Dicyan- $\beta$ -Oxy- $\beta$ -Phenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 162° (Bl. [3] 31, 529 C. 1904 [1] 1554).
- $C_{15}H_{14}O_5N_4$  12) 3,3'-Dinitro-4,4'-Di[Methylamido]diphenylketon. Sm. 212° (G. 34 [1] 386 C. 1904 [2] 111).  
 13) 6-Nitro-2-Oxy-2-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydro-1,3-Benzodiazin. Sm. 243—246° (B. 35, 741 C. 1902 [1] 753; B. 36, 3120 C. 1903 [2] 1132).
- $C_{15}H_{14}O_6S$  2) 4-Benzolsulfonat d. 3,4-Dioxybenzol-3-Aethyläther-1-Carbonsäurealdehyd. Sm. 72° (D.R.P. 81352). — \*III, 76.  
 3) 4-[4-Methylbenzol]sulfonat d. 3,4-Dioxybenzol-3-Methyläther-1-Carbonsäurealdehyd. Sm. 115° (D.R.P. 80498). — \*III, 76.
- $C_{15}H_{14}O_6N_2$  2)  $\beta\beta$ -Di[p-Nitro-4-Oxyphenyl]propan. Sm. 133°.  $Na_2$  (C. 1904 [2] 1737).  
 3) Dimethyläther d. 3,3'-Dinitro-4,4'-Dioxydiphenylmethan. Sm. 160° (D.R.P. 140690 C. 1903 [1] 1010).
- $C_{15}H_{14}NJ$  9) 3,4-Dimethyldiphenyljodoniumcyanid. Sm. 104—108° (A. 327, 281 C. 1903 [2] 351).
- $C_{15}H_{14}N_2S$  13) 2-Phenylimido-5-Phenyltetrahydrothiazol. Sm. 113,5—115°. Pikrat (B. 37, 2485 C. 1904 [2] 420).  
 14) 1-[2-Methylphenyl]amido-4-Methylbenzthiazol. Sm. 136—137° (B. 36, 3129 C. 1903 [2] 1070).  
 15) 1-[4-Methylphenyl]amido-5-Methylbenzthiazol. Sm. 162° (B. 36, 3131 C. 1903 [2] 1070).
- $C_{15}H_{15}ON$  \*33) i- $\alpha$ -Benzoylamido- $\alpha$ -Phenyläthan. Sm. 120° (Soc. 83, 1152 C. 1903 [2] 1061).  
 \*76) Phenylbenzylamid d. Essigsäure. Sm. 58° (C. r. 139, 300 C. 1904 [2] 703).  
 92) Methyläther d.  $\alpha$ -Benzylimido- $\alpha$ -Oxy- $\alpha$ -Phenylmethan. Sd. 178 bis 180°<sub>11</sub> (Soc. 83, 328 C. 1903 [1] 581, 876).  
 93) anti- $\alpha$ -Oximido-2,4'-Dimethyldiphenylmethan. Sm. 122° (B. 36, 2026 C. 1903 [2] 376).  
 94) anti- $\alpha$ -Oximido-3,4'-Dimethyldiphenylmethan. Sm. 118—119° (B. 36, 2027 C. 1903 [2] 376).  
 95) syn- $\alpha$ -Oximido-3,4'-Dimethyldiphenylmethan. Sm. 143° (B. 36, 2027 C. 1903 [2] 376).  
 96) 5-Keto-3,4-Dimethyl-2-[ $\gamma$ -Phenylallyliden]-2,5-Dihydropyrrol. Sm. 248° (A. 306, 246). — \*II, 991.  
 97) 4-Methylphenylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 144° (B. 36, 2027 C. 1903 [2] 376).  
 98) Methylbenzylamid d. Benzolcarbonsäure. Sd. 213—214°<sub>11</sub> (Soc. 83, 408 C. 1903 [1] 833).  
 99) Methyl-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 65—66° (Soc. 83, 408 C. 1903 [1] 833).  
 100) Methyl-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 46—48° (Soc. 83, 408 C. 1903 [1] 833).
- $C_{15}H_{15}ON_3$  \*1) 4-Acetylamido-1-Phenylhydrazonmethylbenzol. Sm. 209° (M. 24, 89 C. 1903 [1] 921).  
 \*18) Phenylamid d.  $\alpha$ -Phenylhydrazonpropionsäure. Sm. 174° (A. 335, 97 C. 1904 [2] 1232).  
 27)  $\alpha$ -Benzylidenamido- $\alpha$ -Methyl- $\beta$ -Phenylharnstoff. Sm. 108° (B. 37, 2323, 2325 C. 1904 [2] 312).  
 28)  $\alpha$ -Benzylidenamido- $\alpha$ -Benzylharnstoff. Sm. 153—154° (B. 37, 2325 C. 1904 [2] 312).  
 29) 3-Keto-4,5,6-Trimethyl-2-Phenyl-2,3-Dihydro-5,1,2-Benzotriazol + 3H<sub>2</sub>O. Sm. 122° (144° wasserfrei) (B. 36, 518 C. 1903 [1] 649).  
 30)  $\alpha$ -Phenyläthylidenhydrazid d. 2-Amidobenzol-1-Carbonsäure. Sm. 165° (J. pr. [2] 69, 99 C. 1904 [1] 730).
- $C_{15}H_{15}O_2N$  \*44) Benzylamid d. 4-Oxybenzylmethyläther-1-Carbonsäure. Sm. 131° (B. 37, 4138 C. 1904 [2] 1714).  
 64) 1-Aethyläther d. 4-[2-Oxybenzyliden]amido-1-Oxybenzol. Sm. 94° (90—91,5°) (D. R. P. 79814, 79857). — \*III, 52.

- $C_{15}H_{15}O_2N$  65)  $\beta$ -Benzoylamido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sm. 144—145,5° (B. 37, 2484 C. 1904 [2] 420).  
 66) N-Benzoyl- $\beta$ -Oxyäthylphenylamin. Sm. 142—146° (A. 332, 212 C. 1904 [2] 211).  
 67) Benzoat d.  $\beta$ -Phenylamido- $\alpha$ -Oxyäthan. Sm. 77°. HCl (A. 332, 209 C. 1904 [2] 211).  
 68) Phenylamidoformiat d. 2-Oxymethyl-1-Methylbenzol. Sm. 79° (C. r. 137, 574 C. 1903 [2] 1117).
- $C_{15}H_{15}O_2N_3$  \*3)  $\alpha$ -Acetylamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 184° (B. 36, 1365 C. 1903 [1] 1341).  
 \*4)  $\alpha$ -Acetylphenylamido- $\beta$ -Phenylharnstoff. Sm. 192° (B. 36, 1369 C. 1903 [1] 1342).  
 39) Phenylamid d.  $\beta$ -Phenylureidoessigsäure. Sm. 214° (J. pr. [2] 70, 249 C. 1904 [2] 1463).  
 40) Phenylamid d. 4-Aethoxyphenylazoameisensäure. Sm. 139—140° (A. 334, 180, 184 C. 1904 [2] 834).  
 41) Di[Phenylamid] d. Amidomalonsäure. Sm. 141—142° (C. 1904 [1] 1555).
- $C_{15}H_{15}O_2N_5$  6) Amid d. s-Diphenylguanidin-2,2'-Dicarbonsäure + H<sub>2</sub>O. Sm. oberh. 290° (wasserfrei). Pikrat (J. pr. [2] 69, 37 C. 1904 [1] 641).
- $C_{15}H_{15}O_3N$  \*27) 3-Methyläther d. 6-Benzoylamido-3,5-Dioxy-1-Methylbenzol. Sm. 219—220° (B. 36, 891 C. 1903 [1] 966).  
 32) Dimethyläther d. 2'-Amido-2,4-Dioxydiphenylketon. Sm. 128° (B. 35, 4280 C. 1903 [1] 333).  
 33) 1-Aethyläther d. 4-Benzoylamido-1,3-Dioxybenzol. Sm. 187° (J. pr. [2] 70, 327 C. 1904 [2] 1541).  
 34) 4-Methoxyphenylamid d. 4-Oxybenzylmethyläther-1-Carbonsäure. Sm. 202° (B. 36, 654 C. 1903 [1] 768).  
 35) 4-Methoxyphenylimid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonsäure (2 isom. Formen). Sm. 108° (B. 36, 1003 C. 1903 [1] 1132).
- $C_{15}H_{15}O_3N_3$  11) Methyläther d. p-Nitro- $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]-hydrazin. Sm. 159—159,5° (B. 36, 372 C. 1903 [1] 577).  
 12) Methyläther d.  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Nitro-4-Oxybenzyliden]-hydrazin. Sm. 104,5—105,2° (B. 36, 363 C. 1903 [1] 577).  
 13)  $\alpha\gamma$ -Diphenylsemicarbazidoessigsäure. Sm. 203—204° u. Zers. (B. 36, 3886 C. 1904 [1] 27).
- $C_{15}H_{15}O_4N_3$  9) Aethyl-2,4'-Dinitro-2-Methyldiphenylamin. Sm. 114° (J. pr. [2] 68, 258 C. 1903 [2] 1064).  
 10) Aethyl-2,4'-Dinitro-4-Methyldiphenylamin. Sm. 120° (J. pr. [2] 68, 256 C. 1903 [2] 1064).  
 11) p-Nitroäthylbenzyl-4-Nitrophenylamin. Sm. 71° (A. 334, 256 C. 1904 [2] 901).  
 12) Dimethyläther d. 5-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 108—110° (B. 35, 4399 C. 1903 [1] 341).
- $C_{15}H_{15}O_5N$  5) 2,3-Dioxyphenylester d. 4-Aethoxyphenylamidoameisensäure. Sm. 162° (B. 37, 110 C. 1904 [1] 584).
- $C_{15}H_{15}O_6N$  4) Diäthylester d. Phtalylamidomalonsäure. Sm. 73,8—74°. Na (C. 1903 [2] 33).
- $C_{15}H_{15}O_6N_5$  2) 4,6-Dinitro-5-Methylnitramido-2,4'-Dimethyldiphenylamin. Sm. 184° (J. pr. [2] 67, 525 C. 1903 [2] 239).
- $C_{15}H_{15}O_9N$  C 51,0 — H 4,2 — O 40,8 — N 4,0 — M. G. 353.  
 1)  $\alpha$ -[2-Carboxybenzoyl]amidobutan- $\alpha\alpha\delta$ -Tricarbonsäure (C. 1903 [2] 33).
- $C_{15}H_{15}NBr_2$  3)  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Methylphenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthan. Sm. 154° (B. 36, 1684 C. 1903 [2] 46).
- $C_{15}H_{15}NS_2$  3) Dibenzylamidodithioameisensäure. Dibenzylaminsalz (B. 37, 3236 C. 1904 [2] 1153).
- $C_{15}H_{15}N_2Cl$  5) 5-Chlormethylat d. 3,8-Dimethyldiphenazon. 2 + ZnCl<sub>2</sub> (B. 37, 27 C. 1904 [1] 523).
- $C_{15}H_{15}N_3S$  6)  $\alpha$ -Benzylidenamido- $\alpha$ -Methyl- $\beta$ -Phenylthioharnstoff. Sm. 132° (B. 37, 2322 C. 1904 [2] 311).  
 7)  $\alpha$ -Benzylidenamido- $\beta$ -Methyl- $\alpha$ -Phenylthioharnstoff. Sm. 151—152° (B. 37, 2331 C. 1904 [2] 314).

- $C_{15}H_{15}N_3S_2$  1) Methyläther d.  $\alpha$ -Phenylimido- $\alpha$ -[ $\beta$ -Phenylthioursido]- $\alpha$ -Merkapto-  
methan. Sm. 101° (*Am.* 30, 176 *C.* 1903 [2] 872).
- $C_{15}H_{15}ON_2$  \*7) s-Di[2-Methylphenyl]harnstoff. Sm. 250° (*M.* 25, 378 *C.* 1904 [2] 320).  
\*8) s-Di[3-Methylphenyl]harnstoff. Sm. 221° (*M.* 25, 382 *C.* 1904 [2] 320).  
\*38) Methyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Oxyphenyl]äthan. Sm. 114°  
(*B.* 36, 3589 *C.* 1903 [2] 1365).  
\*45) Aethyläther d. 4'-Oxy-2-Methylazobenzol (*B.* 36, 3859 *C.* 1904 [1] 91).  
79) Aethylbenzyl-4-Nitrosophenylamin. Sm. 61—62°. HCl (*A.* 334,  
238 *C.* 1904 [2] 900).  
80) 4,4'-Di[Methylamidophenyl]keton. Sm. 130°. (2HCl, PtCl<sub>4</sub>) (*B.* 37,  
2677 *C.* 1904 [2] 443).  
81)  $\beta$ -Benzoyl- $\alpha$ -Aethyl- $\alpha$ -Phenylhydrazin. Sm. 168° (*C.* 1903 [1] 1128;  
*B.* 35, 4189 *C.* 1903 [1] 143).  
82) Methyläther d.  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin.  
Sm. 113,5—114° (*B.* 36, 363 *C.* 1903 [1] 577).  
83) Methyläther d. polym.  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]-  
hydrazin = (C<sub>15</sub>H<sub>15</sub>ON<sub>2</sub>)<sub>x</sub>. Sm. 106,5—108,5° (*B.* 36, 369 *C.* 1903 [1]  
577).  
84) 5-Oxy-4-Phenylhydrazonmethyl-1,2-Dimethylbenzol. Sm. 190°  
(*B.* 35, 4104 *C.* 1903 [1] 149).  
85) 4-Oxy-5-Phenylhydrazonmethyl-1,3-Dimethylbenzol. Sm. 105°  
(*B.* 35, 4104 *C.* 1903 [1] 149).  
86) 3-Oxy-2-Phenylhydrazonmethyl-1,4-Dimethylbenzol. Sm. 148°  
(*B.* 35, 4104 *C.* 1903 [1] 149).  
87) 5-Oxy-2-Phenylhydrazonmethyl-1,4-Dimethylbenzol. Sm. 164°  
(*B.* 35, 4105 *C.* 1903 [1] 149).  
88) Phenylamid d.  $\beta$ -Phenylamidopropionsäure. Sm. 92—93°. HCl  
(*B.* 36, 1264 *C.* 1903 [1] 1219).  
89) Phenylhydrazid d.  $\beta$ -Phenylpropionsäure. Sm. 116—117° (*B.* 36,  
1101 *C.* 1903 [1] 1140).
- $C_{15}H_{15}O_2N_2$  \*43) Aethylphenyl-3-Nitrobenzylamin. Sm. 69°. HCl, Pikrat (*A.* 334,  
243 *C.* 1904 [2] 901).  
45) Aethylbenzyl-2-Nitrophenylamin. Fl. (2HCl, PtCl<sub>4</sub>) (*A.* 334, 252  
*C.* 1904 [2] 901).  
46) Aethylbenzyl-4-Nitrophenylamin. Sm. 63° (*A.* 334, 258 *C.* 1904  
[2] 902).  
47) Aethylphenyl-2-Nitrobenzylamin. Sm. 66°. HCl, (2HCl, PtCl<sub>4</sub>)  
(*A.* 334, 248 *C.* 1904 [2] 901).  
48) Aethylphenyl-4-Nitrobenzylamin. Sm. 67° (*A.* 334, 247 *C.* 1904  
[2] 901).  
49) Methyläther d.  $\beta$ -[4-Oxybenzoyl]- $\alpha$ -Methyl- $\alpha$ -Phenylhydrazin. Sm.  
165—166,5° u. Zers. (*B.* 36, 366 *C.* 1903 [1] 577).  
50) 2'-Amido-2,4-Dimethyldiphenylamin-4'-Carbonsäure. Sm. 179°  
(*A.* 332, 90 *C.* 1904 [1] 1570).
- $C_{15}H_{15}O_2N_4$  19) 4,4'-Di[Methylnitrosamidophenyl]methan. Sm. 97—98° (*B.* 37, 2675  
*C.* 1904 [2] 443).  
20)  $\alpha$ -Phenylureido- $\alpha$ -Methyl- $\beta$ -Phenylharnstoff. Sm. 204° (*B.* 37, 2324  
*C.* 1904 [2] 312).  
21) 2-Dimethylamido-1-[4-Nitrophenylhydrazon]methylbenzol. Sm.  
190,5—191° (*B.* 37, 977 *C.* 1904 [1] 1079).  
22) 5-Nitro-2-Dimethylamidobenzylidenphenylhydrazin. Sm. 168°  
(*M.* 25, 369 *C.* 1904 [2] 322).  
23) Phenylhydrazid d.  $\beta$ -Phenylureidoessigsäure. Sm. 227° (*J. pr.* [2]  
70, 251 *C.* 1904 [2] 1464).
- $C_{15}H_{15}O_3N_2$  21) 4'-Dimethylamido-4-Oxydiphenylamin-3-Carbonsäure. Sm. 175  
bis 177° (*D.R.P.* 140733 *C.* 1903 [1] 1011).  
22) Verbindung (aus d. Verb. C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>). 2HCl (*J. pr.* [2] 70, 372  
*C.* 1904 [2] 1566).
- $C_{15}H_{15}O_4N_4$  3) 4,6-Dinitro-5-Methylamido-2,4'-Dimethyldiphenylamin. Sm. 164°  
(*J. pr.* [2] 67, 537 *C.* 1903 [2] 239).
- $C_{15}H_{15}O_4S_2$  8)  $\alpha$ -Phenylsulfon- $\alpha$ -Benzylsulfonäthan. Sm. 144° (*B.* 36, 301 *C.* 1903  
[1] 500).  
9)  $\alpha$ -Aethylsulfon- $\alpha$ -Phenylsulfon- $\alpha$ -Phenylmethan. Sm. 155—156°  
(*B.* 36, 301 *C.* 1903 [1] 500).

- $C_{15}H_{16}O_5N_2$  3) Diamid d.  $\delta$ -Keto- $\delta$ -Phenyl- $\beta$ -Buten- $\alpha\beta\gamma$ -Tricarbonsäuremono-äthylester. Sm. 185—186° (Soc. 69, 1385; 77, 805). — \*II, 1200.  
C 54,2 — H 4,8 — O 24,1 — N 16,9 — M. G. 332.
- $C_{15}H_{16}O_5N_4$  1) Verbindung (aus 6-Methyl-3-Phenyl-1,4-Dihydro-1,2-Diazin-1,5-Dicarbon-säure-5-Aethylester-1-Amid). Sm. 270° u. Zers. (A. 331, 313 C. 1904 [2] 46).
- $C_{15}H_{16}O_6N_4$  2) 5-Amido-1,2,4-Trimethylbenzol + 1,3,5-Trinitrobenzol. Sm. 115° (Soc. 85, 239 C. 1904 [1] 1006).
- $C_{15}H_{16}O_8S_2$  1) Benzylidenfurfurylidenbishydrosulfonsäure.  $K_2 + 2H_2O$  (B. 37, 4056 C. 1904 [2] 1649).
- $C_{15}H_{16}N_2S$  \*7) s-Di[2-Methylphenyl]thioharnstoff. Sm. 157° (153—154°) (B. 36, 3847 C. 1904 [1] 89; C. r. 139, 451 C. 1904 [2] 1114).
- \*8) s-Di[3-Methylphenyl]thioharnstoff. Sm. 120—121° (C. r. 139, 451 C. 1904 [2] 1114).
- \*9) s-Di[4-Methylphenyl]thioharnstoff. Sm. 176° (178—179°) (B. 36, 3847 C. 1904 [1] 89; C. r. 139, 451 C. 1904 [2] 1114).
- $C_{15}H_{16}N_3Cl$  3) 2-Chlor-4-Dimethylamidobenzylidenphenylhydrazin. Sm. 122° (B. 37, 864 C. 1904 [1] 1207).
- $C_{15}H_{16}ClJ$  3) 2-Methyl-4'-Aethyldiphenyljodoniumchlorid. Sm. 165°. 2 +  $PtCl_4$  (A. 327, 294 C. 1903 [2] 352).
- $C_{15}H_{16}BrJ$  2) 2-Methyl-4'-Aethyldiphenyljodoniumbromid. Sm. 150° (A. 327, 294 C. 1903 [2] 352).
- $C_{15}H_{17}ON$  \*5)  $\alpha$ -Oxy-4-Dimethylamidodiphenylmethan. Sm. 69—70° (B. 37, 1742 C. 1904 [1] 1599).
- \*20) Phenylamid d.  $\alpha$ -Camphylsäure. Sm. 111—112° (Soc. 83, 850 C. 1903 [2] 572).
- 34) 4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 108—109° (A. 334, 339 C. 1904 [2] 989).
- 35) 4-[2-Oxybenzyl]amido-1,3-Dimethylbenzol. Sm. 114° (Ar. 240, 687 C. 1903 [1] 395).
- $C_{15}H_{17}O_2N$  15) 4'-Aethylamido-2,4-Dioxydiphenylmethan. Sm. 154—155° (M. 23, 995 C. 1903 [1] 289).
- 16) 1-Aethyläther d. 4-[2-Oxybenzyl]amido-1-Oxybenzol. Sm. 145 bis 146° (Ar. 240, 683 C. 1903 [1] 395).
- 17) Acetat d. 2-Methyläthylamido-1-Oxynaphtalin. Sd. 212—215°<sub>40</sub> (Soc. 83, 761 C. 1903 [1] 1419 C. 1903 [2] 448).
- $C_{15}H_{17}O_2N_3$  6) Aethyläther d.  $\beta$ -[4-Oxyphenyl]amido- $\alpha$ -Phenylharnstoff. Sm. 137—138° u. Zers. (A. 334, 181 C. 1904 [2] 834).
- $C_{15}H_{17}O_3N_3$  2) 1-Amid d. 6-Methyl-3-Phenyl-1,4-Dihydro-1,2-Diazin-1,5-Dicarbon-säure-5-Aethylester. Sm. 254,5° (A. 331, 312 C. 1904 [2] 45).
- $C_{15}H_{17}O_4N$  10) Methylester d. i- $\alpha$ -[1,2-Phtalyl]amidopentan- $\alpha$ -Carbonsäure. Sm. 65,5—66° (B. 37, 1695 C. 1904 [1] 1525).
- 11) Aethylester d.  $\alpha$ -Phtalylamidoisovaleriansäure. Sd. 332—337°<sub>63</sub> (B. 37, 1694 C. 1904 [1] 1525).
- 12) 4-Methoxyphenylmonamid d. 1,2,3,4-Tetrahydrobenzol-5,6-Di-carbonsäure. Sm. 150—155° (B. 36, 999 C. 1903 [1] 1131).
- $C_{15}H_{17}O_5N$  3) Aethylester d.  $\alpha$ -[4-Aethoxyphtalyl]amidopropionsäure. Sm. 78° (B. 37, 1978 C. 1904 [2] 237).
- $C_{15}H_{17}O_5N_7$  C 48,0 — H 4,5 — O 21,3 — N 26,1 — M. G. 375.
- 1) Azid d. Benzoyltri[Amidoacetyl]amidoessigsäure. Sm. 245—258° (J. pr. [2] 70, 87 C. 1904 [2] 1034).
- $C_{15}H_{17}O_5P$  \*1)  $\beta\beta'$ -Diphenoxylisopropylphosphorigesäure.  $Ca + 2H_2O$ , Anilinsalz, p-Toluidinsalz (Soc. 83, 1137 C. 1903 [2] 1059).
- $C_{15}H_{17}O_7N$  C 55,7 — H 5,3 — O 34,7 — N 4,3 — M. G. 323.
- 1) 3,5-Diacetat d. 2-Diacetylamido-1,3,5-Trioxybenzol-1-Methyläther. Sm. 127—129° (M. 23, 953 C. 1903 [1] 285).
- $C_{15}H_{17}O_9N$  C 50,7 — H 4,8 — O 40,6 — N 3,9 — M. G. 355.
- 1) Diäthylester d. Mono[3-Nitrobenzoyl]weinsäure. Sm. 113,5° (Soc. 83, 170 C. 1903 [1] 389, 628).
- $C_{15}H_{17}N_3S$  \*7)  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -Benzylthioharnstoff. Sm. 120—121° (J. pr. [2] 67, 258 Ann. C. 1903 [1] 1265).
- 14) isom.  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -Benzylthioharnstoff. Sm. 156° (J. pr. [2] 67, 258 C. 1903 [1] 1265).

- $C_{15}H_{17}N_3S$  15) Methyläther d.  $\alpha$ -[ $\alpha$ -Benzylhydrazido]- $\alpha$ -Phenylimido- $\alpha$ -Merkapto-methan. Fl. (B. 37, 2329 C. 1904 [2] 313).  
16) Methyläther d.  $\alpha$ -[ $\beta$ -Benzylhydrazido]- $\alpha$ -Phenylimido- $\alpha$ -Merkapto-methan. Fl. (B. 37, 2329 C. 1904 [2] 313).
- $C_{15}H_{18}ON_2$  \*16) Aethyläther d. 4'-Oxy-4-Methyl-s-Diphenylhydrazin. Sm. 96—97° (B. 36, 3850 C. 1904 [1] 89).  
26)  $\alpha$ -Oxydi[4-Amido-3-Methylphenyl]methan. Sm. 135° (C. 1903 [2] 442).  
27) 4'-Dimethylamido-4-Oxy-3-Methyldiphenylamin. Sm. 153—154° (D.R.P. 140733 C. 1903 [1] 1011).  
28) Aethyläther d. 2'-Amido-5'-Oxy-2-Methyldiphenylamin.. Sm. 82 bis 83° (B. 36, 3860 C. 1904 [1] 91).  
29) Aethyläther d. 4-Oxy-2-Methyl-s-Diphenylhydrazin. Sm. 100° (B. 36, 3853 C. 1904 [1] 90).
- $C_{15}H_{18}O_2N_2$  11) 4'-Dimethylamido-3-Oxy-4-Oxymethyldiphenylamin? Sm. noch nicht bei 300° (J. pr. [2] 69, 239 C. 1904 [1] 1269).  
12)  $\beta\beta$ -Di[P-Amido-4-Oxyphenyl]propan. Sm. 218—219° (C. 1904 [2] 1737).  
13) Dimethyläther d. 3,3'-Diamido-4,4'-Dioxydiphenylmethan. Sm. 107° (D.R.P. 140690 C. 1903 [1] 1010).  
14) Dimethyläther d. Di[2-Oxyphenylamido]methan. Sm. 86° (B. 36, 48 C. 1903 [1] 505).  
15) Dimethyläther d. Di[4-Oxyphenylamido]methan. Sm. 66° (B. 36, 49 C. 1903 [1] 505).
- $C_{15}H_{18}O_2N_4$  16) Verbindung (aus Parasantonid). Sm. 171—172° (C. 1903 [2] 1377).  
3) Aethylester d. 3-[ $\alpha$ -Phenylhydrazonäthyl]-4-Methylpyrazol-5-Carbonsäure. Sm. 197—198° (B. 36, 1130 C. 1903 [1] 1138).  
4) Amid d. 5-Keto-1-Phenyl-3-Hexahydrophenyl-4,5-Dihydro-1,2,4-Triazol-4-Carbonsäure. Sm. oberh. 300° (B. 36, 1095 C. 1903 [1] 1140).
- $C_{15}H_{18}O_4N_2$  \*2) Pernitrososantonin. Sm. 190° u. Zers. (G. 33 [1] 195 C. 1903 [2] 45).  
4) 2-Naphthylhydrazon d. l-Xylose. Sm. 123—124° (B. 35, 4444 C. 1903 [1] 392).
- $C_{15}H_{18}O_4N_6$  C 52,0 — H 5,2 — O 18,5 — N 24,3 — M. G. 346.  
1) Azid d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amidopropion-säure. Sm. 145° u. Zers. (J. pr. [2] 70, 125 C. 1904 [2] 1037).
- $C_{15}H_{18}O_4Br_2$  1) Dibromparasantonsäure. Sm. 176—177° u. Zers. (C. 1903 [2] 1447).
- $C_{15}H_{18}O_5N_2$  3) Diäthylester d.  $\beta$ -[2-Methylphenyl]hydrazon- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 86—87° (Bl. [3] 31, 81 C. 1904 [1] 580).  
4) Diäthylester d. isom.  $\beta$ -[2-Methylphenyl]hydrazon- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 155—156° (Bl. [3] 31, 82 C. 1904 [1] 580).
- $C_{15}H_{18}O_6N_2$  6) Dimethylester d.  $\alpha$ -Benzoylamidoacetylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 136—137° (J. pr. [2] 70, 173 C. 1904 [2] 1396).
- $C_{15}H_{18}O_6N_4$  \*1) Benzoyltri[Amidoacetyl]amidoessigsäure. Sm. 233° (235°). Ag (B. 37, 1283 C. 1904 [1] 1335; J. pr. [2] 70, 84 C. 1904 [2] 1034; B. 37, 2505 C. 1904 [2] 426).
- $C_{15}H_{18}NCl$  \*2) 4-[ $\alpha$ -Chloräthyl]-1,3-Dimethylbenzol + Pyridin. Sm. 153° (B. 36, 1637 C. 1903 [2] 26).
- $C_{15}H_{18}NBr$  1) 4-[ $\alpha$ -Bromäthyl]-1,3-Dimethylbenzol + Pyridin. Sm. 144—145° (B. 36, 1638 C. 1903 [2] 26).
- $C_{15}H_{18}NJ$  1) Dimethylphenylbenzylammoniumjodid. Sm. 165° (Soc. 83, 1409 C. 1904 [1] 438).
- $C_{15}H_{18}N_2S$  3)  $\alpha$ -[d-sec. Butyl]- $\beta$ -[1-Naphtyl]thioharnstoff. Sm. 135° (Ar. 242, 63 C. 1904 [1] 998).  
4)  $\alpha$ -[d-sec. Butyl]- $\beta$ -[2-Naphtyl]thioharnstoff. Sm. 120° (Ar. 242, 63 C. 1904 [1] 998).
- $C_{15}H_{18}N_3Cl$  1) Chlormethylat d. 4-Dimethylamidoazobenzol. Sm. 193° (B. 36, 1487 C. 1903 [1] 1350).
- $C_{15}H_{18}N_3J$  \*1) Jodmethylat d. 4-Dimethylamidoazobenzol. Sm. 185° (173°) (B. 36, 1486 C. 1903 [1] 1350; A. 327, 113 C. 1903 [1] 1213).
- $C_{15}H_{19}ON$  15) 2-Oxy-1-[ $\alpha$ -Amidoamyl]naphtalin. Sm. 114°. HCl, Pikrat (G. 33 [1] 11 C. 1903 [1] 925).  
16) Dimethylphenylbenzylammoniumhydroxyd. Jodid, d-Campher-sulfonat (Soc. 83, 1409 C. 1904 [1] 438).

- $C_{15}H_{19}ON$  17) 4-[ $\alpha$ -Oxyäthyl]-1,3-Dimethylbenzol + Pyridin. Chlorid, Bromid, Pikrat (*B.* 36, 1638 *C.* 1903 [2] 26).
- 18) Acetylderivat d. 2-Methylen-1,3-Dimethyl-3-Aethyl-2,3-Dihydroindol. Sm. 85–86° (*G.* 32 [2] 411 *C.* 1903 [1] 838).
- $C_{15}H_{19}O_2N$  11) Parasantonimid. Sm. 216–217° (*C.* 1903 [2] 1067).
- $C_{15}H_{19}O_3N$  14) Parasantoninoximid (*C.* 1903 [2] 1377).
- 15) Oxyparasantoninimid? Sm. 256° (*C.* 1903 [2] 1377).
- 16) Anhydrid d. Verbindung  $C_{15}H_{21}O_4N$ . Sm. 171–172° (*C.* 1904 [1] 1447).
- $C_{15}H_{19}O_4N$  8) Anhydrocotarninacetone. Sm. 83°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 37, 212 *C.* 1904 [1] 590).
- $C_{15}H_{19}O_4N_2$  2) 2,5-Diketo-4,4-Dimethyl-1-Phenyltetrahydroimidazol-3- $\alpha$ -Amidoisobuttersäure. Sm. 205° (*C.* 1904 [2] 1029).
- $C_{15}H_{19}O_5N$  6) Oxim d. Mekoninmethylpropylketon. Sm. 153–157° (*M.* 25, 1056 *C.* 1904 [2] 1644).
- 7) Oxim d. Mekoninmethylisopropylketon. Sm. 110° (*M.* 25, 1057 *C.* 1904 [2] 1644).
- 8) isom. Oxim d. Mekoninmethylisopropylketon. Sm. 223° (*M.* 25, 1059 *C.* 1904 [2] 1644).
- $C_{15}H_{19}O_5N_2$  \*2) Aethylester d. Benzoylbis[Amidoacetyl]amidoessigsäure. Sm. 173° (*J. pr.* [2] 70, 82, 94 *C.* 1904 [2] 1033).
- 3)  $\alpha$ -( $\alpha$ -Benzoylamidoacetyl)amidopropionyl]amidopropionsäure. Sm. 120–130°. Ag (*J. pr.* [2] 70, 122 *C.* 1904 [2] 1037).
- $C_{15}H_{19}O_5Cl$  1) Chlorhydrin d. Dehydrodioxyparasantonsäure. Sm. 204–205° (*C.* 1903 [2] 1447).
- $C_{15}H_{20}O_3N_2$  3) 3,6-Diketo-2-Isobutyl-5-[4-Oxybenzyl]hexahydro-1,4-Diazin + H<sub>2</sub>O (Anhydrid d. Leucyl-Tyrosin). Sm. 310° u. Zers. (*B.* 37, 2498 *C.* 1904 [2] 426).
- $C_{15}H_{20}O_3N_4$  C 59,2 — H 6,6 — O 15,8 — N 18,4 — M. G. 304.
- 1) Isopropylidenhydrazid d.  $\alpha$ -Benzoylamidopropionylamidoessigsäure. Sm. 177° (*J. pr.* [2] 70, 155 *C.* 1904 [2] 1395).
- $C_{15}H_{20}O_4N_2$  11)  $\delta$ -Phenylhydrazonheptan- $\alpha\eta$ -Dicarbonsäure. Sm. 151° u. Zers. (*B.* 37, 3819 *C.* 1904 [2] 1606).
- 12) Aethylester d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 80° (*J. pr.* [2] 70, 207 *C.* 1904 [2] 1459).
- 13) Aethylester d.  $\gamma$ -Benzoylamidoacetylamidobuttersäure. Sm. 94° (*J. pr.* [2] 70, 226 *C.* 1904 [2] 1461).
- 14) Aethylester d.  $\alpha$ -( $\alpha$ -Benzoylamidopropionyl)amidopropionsäure. Sm. 148–149° (*J. pr.* [2] 70, 148 *C.* 1904 [2] 1461).
- 15) Diäthylester d. 4-Phenyltetrahydropyrazol-3,5-Dicarbonsäure. Sm. 91°; Sd. 280° (*B.* 36, 3779 *C.* 1904 [1] 41).
- $C_{15}H_{20}O_5N_4$  C 53,6 — H 5,9 — O 23,8 — N 16,7 — M. G. 336.
- 1) Aethylester d.  $\beta$ -Phenylureidoacetylamidocetylamidocessigsäure. Sm. 203° u. Zers. (*J. pr.* [2] 70, 259 *C.* 1904 [2] 1464).
- $C_{15}H_{20}O_5N_6$  C 49,4 — H 5,5 — O 22,0 — N 23,1 — M. G. 364.
- 1) Hydrazid d. Benzoyltri[Amidoacetyl]amidoessigsäure. Sm. 268° (*J. pr.* [2] 70, 86 *C.* 1904 [2] 1034).
- $C_{15}H_{20}O_5S_2$  1) 4-Methyl-1,3-Phenylendi[ $\alpha$ -Sulfonbuttersäure]. Fl. Ba (*J. pr.* [2] 68, 338 *C.* 1903 [2] 1172).
- 2) Diäthylester d. 4-Methyl-1,3-Phenylendi[Sulfonessigsäure]. Fl. (*J. pr.* [2] 68, 337 *C.* 1903 [2] 1172).
- $C_{15}H_{21}ON_3$  C 69,5 — H 8,1 — O 6,2 — N 16,2 — M. G. 259.
- 1)  $\gamma$ -Semicarbazon- $\alpha$ -[4-Isopropylphenyl]- $\alpha$ -Penten. Sm. 193° (*A.* 330, 258 *C.* 1904 [1] 946).
- 2)  $\gamma$ -Semicarbazon- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methyl- $\alpha$ -Buten. Sm. 177,5° (*A.* 330, 261 *C.* 1904 [1] 947).
- 3) 4-Diäthylamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol (*C.* 1897 [1] 1140; D.R.P. 144393 *C.* 1903 [2] 777).
- $C_{15}H_{21}O_2N$  13) Phenylamidoformiat d. 1-Oxy-1-Aethylhexahydrobenzol. Sm. 83° (*C. r.* 138, 1324 *C.* 1904 [2] 219).
- $C_{15}H_{21}O_3N$  15) Phenylmonamid d.  $\beta$ -Methylhexan- $\beta\epsilon$ -Dicarbonsäure. Sm. 176–178° (*A.* 329, 93 *C.* 1903 [2] 1071).
- $C_{15}H_{21}O_4N$  10) Parasantoninhydroxamsäure? Sm. 180° (*C.* 1903 [2] 1377).

- $C_{15}H_{21}O_4N$  11) Anhydrid d. Hydroxamsantolsäure. Sm. 226—227°. Ba + H<sub>2</sub>O (G. 33 [1] 199 C. 1903 [1] 45).
- 12) Verbindung (aus Parasantonsäure). Sm. 239—240° u. Zers. (C. 1903 [2] 1446).
- $C_{15}H_{21}O_4N_3$  C 58,6 — H 6,8 — O 20,8 — N 13,7 — M. G. 307.
- 1) Aethylester d.  $\beta$ -Benzoylamidoacetylamidopropylamidoameisensäure. Sm. 151° (J. pr. [2] 70, 215 C. 1904 [2] 1460).
- $C_{15}H_{21}O_4N_5$  C 53,8 — H 6,2 — O 19,1 — N 20,9 — M. G. 335.
- 1) Amid d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amidoäthylamidoameisensäure. Sm. 199° (J. pr. [2] 70, 126 C. 1904 [2] 1037).
- 2) Hydrazid d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amidopropionsäure. Sm. 213° (J. pr. [2] 70, 124 C. 1904 [2] 1037).
- $C_{15}H_{21}O_5N$  2) Amid d. 3,4-Dioxy-1-[ $\alpha$ -Oxy- $\gamma$ -Ketoisohexyl]benzol-3,4-Dimethyläther-2-Carbonsäure. Sm. 141—143° (M. 25, 1061 C. 1904 [2] 1644).
- $C_{15}H_{21}O_5N_5$  C 51,3 — H 6,0 — O 22,8 — N 19,9 — M. G. 351.
- 1) Aethylester d.  $\beta$ -Phenylureidoacetylamidomethylamidoameisensäure. Sm. 244° u. Zers. (J. pr. [2] 70, 262 C. 1904 [2] 1465).
- $C_{15}H_{22}ON_2$  8)  $\alpha$ -Aethyl- $\alpha$ -Hexahydrophenyl- $\beta$ -Phenylharnstoff. Sm. 125° (C. r. 138, 1258 C. 1904 [2] 105).
- $C_{15}H_{22}O_2N_2$  5) Piperidinverbindung d. Anetholnitrosochlorid. Sm. 107° (C. 1904 [2] 1038).
- $C_{15}H_{22}O_3N_2$  2)  $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido- $\beta$ -Phenylpropionsäure + H<sub>2</sub>O. Sm. 220—223° (B. 37, 3308 C. 1904 [2] 1306).
- 3) isom.  $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido- $\beta$ -Phenylpropionsäure. Sm. 259° u. Zers. (B. 37, 3308 C. 1904 [2] 1306).
- $C_{15}H_{22}O_3S$  1)  $\gamma$ -Keto- $\epsilon$ -Aethylsulfon- $\epsilon$ -Phenyl- $\beta$ -Methylpentan. Sm. 122—124° (B. 37, 506 C. 1904 [1] 883).
- $C_{15}H_{22}O_4N_2$  7) Metasantonsäuredioxim. Sm. 115—120° (G. 29 [2] 234). — \*II, 1045.
- 8) 1- $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido- $\beta$ -[4-Oxyphenyl]propionsäure (Leucyl-Tyrosin) (B. 37, 2498 C. 1904 [2] 426).
- $C_{15}H_{22}O_7N_2$  \*1) Triäthylester d.  $\delta\epsilon$ -Diimido- $\beta$ -Ketohehexan- $\gamma\zeta\zeta$ -Tricarbonsäure (A. 332, 144 C. 1904 [2] 191).
- $C_{15}H_{22}O_8Br_2$  1) Tetraäthylester d.  $\alpha\gamma$ -Dibrompropan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sm. 54—55° (Soc. 83, 782 C. 1903 [2] 201, 439).
- $C_{15}H_{22}N_2S$  3)  $\alpha$ -Aethyl- $\alpha$ -Hexahydrophenyl- $\beta$ -Phenylthioharnstoff. Sm. 126° (C. r. 138, 1258 C. 1904 [2] 105).
- $C_{15}H_{23}ON_3$  2)  $\gamma$ -Semicarbazon- $\alpha$ -[4-Isopropylphenyl]pentan. Sm. 214,5° (A. 330, 260 C. 1904 [1] 947).
- 3)  $\gamma$ -Semicarbazon- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylbutan. Sm. 148,5° (A. 330, 263 C. 1904 [1] 947).
- $C_{15}H_{23}O_2N$  6) Benzoat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylpentan. HCl (C. r. 138, 767 C. 1904 [1] 1196).
- 7) Phenylamidoformiat d.  $\alpha$ -Oxyoktan. Sm. 69° (74°) (Bl. [3] 31, 50 C. 1904 [1] 507; C. r. 136, 1677 C. 1903 [2] 419).
- 8) Phenylamidoformiat d.  $\beta$ -Oxyoktan. Fl. (Bl. [3] 31, 51 C. 1904 [1] 507).
- 9) Phenylamid d.  $\alpha$ -Oxyoktan- $\alpha$ -Carbonsäure. Sm. 69—70° (C. r. 138, 698 C. 1904 [1] 1066).
- $C_{15}H_{23}O_5N$  3) Oxim d. Santolsäure. Sm. 202—205° u. Zers. (G. 33 [1] 205 C. 1903 [2] 45).
- $C_{15}H_{23}O_5N_3$  C 55,4 — H 7,1 — O 24,6 — N 12,9 — M. G. 325.
- 1) Semicarbazon d. Keto- $\beta$ -Santorsäuredimethylester. Sm. 168° (C. 1896 [2] 1114). — \*II, 1115.
- $C_{15}H_{23}O_6N$  4) Triäthylester d.  $\gamma$ -Cyanpentan- $\alpha\gamma\epsilon$ -Tricarbonsäure. Fl. (Soc. 85, 422 C. 1904 [1] 1439).
- $C_{15}H_{23}O_8N$  C 52,2 — H 6,6 — O 37,1 — N 4,1 — M. G. 345.
- 1) Verbindung (aus  $\delta\epsilon$ -Diimido- $\beta$ -Ketohehexan- $\gamma\zeta\zeta$ -Tricarbonsäuretriäthylester). Sm. 110° (A. 332, 144 C. 1904 [2] 191).
- $C_{15}H_{23}O_8N_5$  C 44,9 — H 5,7 — O 31,9 — N 17,5 — M. G. 401.
- 1) Pepton (aus Leim) (H. 38, 322 C. 1903 [2] 213).
- 2) Dimethylester d. Semicarbazonglyoximperoxydihydrotetramethylimalonsäure. Sm. 170—172° (Soc. 83, 1261 C. 1903 [2] 1423).

- $C_{15}H_{24}ON_2$  \*1) d-Lupanin. (HCl,  $AuCl_3$ ), HJ +  $2H_2O$ , CHNS +  $H_2O$  (C. 1903 [1; 930; G. 33 [1] 428 C. 1903 [2] 839; Ar. 242, 415 C. 1904 [2] 781; Ar. 242, 432 C. 1904 [2] 783).
- $C_{15}H_{24}O_2N_2$  2) Oxylupanin +  $2H_2O$ . Sm.  $76-77^\circ$  ( $172-174^\circ$  wasserfrei). HCl +  $2H_2O$ ,  $2HCl + H_2O$ , ( $2HCl$ ,  $PtCl_4 + H_2O$ ), (HCl,  $AuCl_3$ ), CHNS +  $H_2O$  (Ar. 242, 419 C. 1904 [2] 782).
- $C_{15}H_{24}O_4N_2$  \*1) Caryophyllennitrosat. Sm.  $152^\circ$  (Ar. 241, 38 C. 1903 [1] 712).
- $C_{15}H_{24}O_4S_2$  1) 2,4-Di[Butylsulfon]-1-Methylbenzol. Fl. (J. pr. [2] 68, 336 C. 1903 [2] 1172).
- $C_{15}H_{24}O_6N_2$  C 57,7 — H 7,7 — O 25,6 — N 9,0 — M. G. 312.
- 1) Aethylester d. 6-Keto-2,4-Dioxy-5-Cyan-2-Methyl-5-Propylhexahydropyridin-4-Aethyläther-3-Carbonsäure. Sm.  $260^\circ$  (G. 33 [2] 165 C. 1903 [2] 1283).
- 2)  $\alpha$ -Verbindung (aus Cyklogallipharsäure). Sm.  $63,5^\circ$  (Ar. 242, 266 C. 1904 [1] 1654).
- 3)  $\beta$ -Verbindung (aus Cyklogallipharsäure). Sm.  $59,5^\circ$  (Ar. 242, 267 C. 1904 [1] 1654).
- $C_{15}H_{24}O_{15}N_3$  1) Karakin. Sm.  $100^\circ$  (C. 1903 [2] 379).
- $C_{15}H_{24}NJ$  1) Methylallyl-1-Amylphenylammoniumjodid (C. 1904 [2] 952).
- $C_{15}H_{25}ON_3$  C 68,4 — H 9,5 — O 6,1 — N 16,0 — M. G. 263.
- 1) Semicarbazon d.  $\alpha$ -Methyljonon. Sm.  $144^\circ$  (D.R.P. 150827 C. 1904 [1] 1379).
- 2) Semicarbazon d. isom.  $\alpha$ -Methyljonon. Sm.  $202^\circ$  (D.R.P. 150827 C. 1904 [1] 1379).
- 3) Semicarbazon d.  $\beta$ -Methyljonon. Sm.  $138-139^\circ$  (D.R.P. 150827 C. 1904 [1] 1379).
- 4) Semicarbazon d. isom.  $\beta$ -Methyljonon. Sm.  $175-176^\circ$  (D.R.P. 150827 C. 1904 [1] 1379).
- $C_{15}H_{25}O_2Cl$  1) Verbindung (aus d. Verb.  $C_{15}H_{24}O$ ) (C. 1904 [2] 1227).
- $C_{15}H_{26}O_2N_2$  \*1) Dioxysparteïn (Sparteïnoxid). Sm.  $127-128^\circ$  (B. 37, 3240 C. 1904 [2] 1154).
- $C_{15}H_{26}O_2N_4$  C 61,2 — H 8,8 — O 10,9 — N 19,0 — M. G. 294.
- 1)  $\beta\zeta$ -Di[Hydroxylamido]- $\delta$ -Phenylhydrazon- $\beta\zeta$ -Dimethylheptan. Sm.  $152^\circ$  (B. 36, 657 C. 1903 [1] 762).
- $C_{15}H_{26}O_3N_2$  C 63,8 — H 9,2 — O 17,0 — N 9,9 — M. G. 282.
- 1) Amidoderivat +  $H_2O$  (aus d. Verb.  $C_{15}H_{24}O_3N_2$ ). Sm.  $47^\circ$  (Ar. 242, 270 C. 1904 [1] 1654).
- $C_{15}H_{27}O_3N_3$  \*2) Menthylester d.  $\beta$ -Semicarbazidopropen- $\alpha$ -Carbonsäure. Sm. 143 bis  $144^\circ$  (Soc. 81, 1504 C. 1903 [1] 138).
- $C_{15}H_{27}O_6N$  C 56,8 — H 8,5 — O 30,3 — N 4,4 — M. G. 317.
- 1) Aethyldiisocamylester d. Stickstofftricarbonsäure. Sd.  $184-186^\circ_{13}$  (B. 37, 3676 C. 1904 [2] 1495).
- $C_{15}H_{27}O_6B$  1) Gem. Anhydrid d. Isovaleriansäure u. Borsäure. Fl. (B. 36, 2223 C. 1903 [2] 421).
- $C_{15}H_{30}O_2N_6$  C 55,2 — H 9,2 — O 9,8 — N 25,8 — M. G. 326.
- 1) Semicarbazidsemicarbazon d. Citronellidenaceton. Sm.  $167^\circ$  (B. 36, 2802 C. 1903 [2] 878; B. 36, 4378 C. 1904 [1] 454).
- $C_{15}H_{30}N_2Cl_2$  1) R-Aethyltrimethylendi[Piperidylumchlorid]. +  $2HgCl_2$ , +  $PtCl_4$  (Ph. Ch. 46, 307 C. 1904 [1] 674).
- 2) isom. R-Aethyltrimethylendi[Piperidylumchlorid]. +  $2HgCl_2$ , +  $PtCl_4$  (Ph. Ch. 46, 309 C. 1904 [1] 674).
- $C_{15}H_{30}N_2Br_2$  \*1) R-Aethyltrimethylendi[Piperidylumbromid]. Sm. oberh.  $300^\circ$  (Ph. Ch. 46, 306 C. 1904 [1] 674).
- 2) isom. R-Aethyltrimethylendi[Piperidylumbromid]. Sm. oberh.  $300^\circ$  (Ph. Ch. 46, 309 C. 1904 [1] 674).
- $C_{15}H_{30}N_2J_2$  1) R-Aethyltrimethylendi[Piperidylumjodid]. Sm.  $300^\circ$  u. Zers. (Ph. Ch. 46, 308 C. 1904 [1] 674).
- 2) isom. R-Aethyltrimethylendi[Piperidylumjodid]. Sm.  $282^\circ$  u. Zers. (Ph. Ch. 46, 310 C. 1904 [1] 674).
- $C_{15}H_{31}ON_3$  C 66,9 — H 11,5 — O 5,9 — N 15,6 — M. G. 269.
- 1)  $\gamma$ -Semicarbazontetradekan. Sm.  $92^\circ$  (Bl. [3] 29, 1211 C. 1904 [1] 355).
- $C_{15}H_{32}O_2N_2$  C 66,2 — H 11,7 — O 11,7 — N 10,3 — M. G. 272.
- 1) R-Aethyltrimethylendi[Piperidylumhydroxyd]. d-Campher-sulfonat (Ph. Ch. 46, 313 C. 1904 [1] 675).

- $C_{15}H_{32}O_2N_2$  2) isom. R-Aethylentrimethylendi[Piperidylumhydroxyd], d-Campher-sulfonat (*Ph. Ch.* 46, 314 *C.* 1904 [1] 675).
- $C_{15}H_{32}N_2S$  2)  $\alpha$ -[d-sec. Butyl]- $\beta\beta$ -Diisoamylthioharnstoff. *Fl.* (*Ar.* 242, 61 *C.* 1904 [1] 998).
- $C_{15}H_{33}O_3B$  \*1) Triisoamylester d. Borsäure. *Sd.* 258° (*B.* 36, 2221 *C.* 1903 [2] 420).
- $C_{15}H_{36}N_2J_2$  1) Di[Jodmethylat] d. Di[Dipropylamido]methan. *Sm.* 96° (*B.* 36, 1199 *C.* 1903 [1] 1215).

## — 15 IV —

- $C_{15}H_7O_4NS_2$  1) Carbindophtenin (*B.* 37, 3351 *C.* 1904 [2] 1058).
- $C_{15}H_7O_4NBr_2$  1) Dibromamido-9,10-Anthrachinon-2-Carbonsäure (D.R.P. 142997 *C.* 1903 [2] 169).
- $C_{15}H_{10}ONCl$  4) 1-Chlor-4-Oxy-3-Phenylisochinolin. *Sm.* 119° (*B.* 37, 1691 *C.* 1904 [1] 1524).
- 5)  $\alpha$ -Benzoyl- $\alpha$ -[4-Chlorphenyl]essigsäure. *Sm.* 92° (*J. pr.* [2] 67, 378 *C.* 1903 [1] 1356).
- $C_{15}H_{10}ONBr_3$  1) Nitril d.  $\alpha\beta\beta$ -Tribrom- $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]propionsäure. *Sm.* 135° (*B.* 37, 3166 *C.* 1904 [2] 983).
- $C_{15}H_{10}O_2NCl$  2) 5-Chlor-1-Methylamido-9,10-Anthrachinon (D.R.P. 144634 *C.* 1903 [2] 750).
- 3) 5-Keto-4-[4-Chlorphenyl]-3-Phenyl-4,5-Dihydroisoxazol. *Sm.* 147° (*J. pr.* [2] 67, 382 *C.* 1903 [1] 1356).
- $C_{15}H_{10}O_2NCl_3$  1) 3,5-Dichlor-4-Acetylchloramidodiphenylketon. *Sm.* 118° (*Soc.* 85, 345 *C.* 1904 [1] 1405).
- $C_{15}H_{10}O_2NBr$  2) 4-Brom-1-Methylamido-9,10-Anthrachinon. *Sm.* 192° (D.R.P. 144634 *C.* 1903 [2] 750).
- 3) 5-Brom-1-Methylamido-9,10-Anthrachinon (D.R.P. 144634 *C.* 1903 [2] 750).
- $C_{15}H_{10}O_3NCl$  1)  $\alpha$ -Chlor- $\gamma$ -Keto- $\alpha$ [oder  $\gamma$ ]-Phenyl- $\gamma$ [oder  $\alpha$ ]-[4-Nitrophenyl]-propen. *Sm.* 131° (*B.* 37, 1152 *C.* 1904 [1] 1267).
- $C_{15}H_{10}O_5N_2S$  1) 6-Phenylazo-1,2-Benzpyron-8-Sulfonsäure (*B.* 37, 4127 *C.* 1904 [2] 1735).
- $C_{15}H_{11}ON_2Cl$  1) 4-Keto-2-[4-Chlorbenzyl]-3,4-Dihydro-1,3-Benzadiazin. *Sm.* 246° u. Zers. (*J. pr.* [2] 69, 22 *C.* 1904 [1] 640).
- 2) Nitril d.  $\beta$ -Oximido- $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylpropionsäure. *Sm.* 168° (*J. pr.* [2] 67, 381 *C.* 1903 [1] 1356).
- 3) Chlorid d. Azobenzol-4-Akrylsäure (*C. r.* 135, 1117 *C.* 1903 [1] 286).
- $C_{15}H_{11}O_2NCl_2$  3) 3,5-Dichlor-4-Acetylamidodiphenylketon. *Sm.* 185° (*Soc.* 85, 345 *C.* 1904 [1] 1405).
- 4) 5-Chlor-2-Acetylchloramidodiphenylketon. *Sm.* 107° (*Soc.* 85, 344 *C.* 1904 [1] 1405).
- 5) 3-Chlor-4-Acetylchloramidodiphenylketon. *Sm.* 102° (*Soc.* 85, 342 *C.* 1904 [1] 1405).
- $C_{15}H_{11}O_2NBr_4$  1) N-Acetylphenyl-3,4,5,6-Tetrabrom-2-Oxybenzylamin. *Sm.* 157 bis 158° (*A.* 332, 178 *C.* 1904 [2] 209).
- $C_{15}H_{11}O_2N_2Cl$  1) Benzyläther d. Chlorisatinnoxim. *Sm.* 224,5° (*B.* 35, 4337 *C.* 1903 [1] 293).
- $C_{15}H_{11}O_2N_2Br$  2) Benzyläther d. Bromisatinnoxim. *Sm.* 200° (*B.* 35, 4337 *C.* 1903 [1] 293).
- $C_{15}H_{11}O_3NBr_2$  \*3)  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[4-Nitrophenyl]- $\alpha$ -Phenylpropan. *Sm.* 151° (*B.* 37, 1149 *C.* 1904 [1] 1267).
- $C_{15}H_{11}O_4NS$  2) 6-Phenylsulfonamido-1,2-Benzpyron. *Sm.* 159° (*Soc.* 85, 1234 *C.* 1904 [2] 1124).
- $C_{15}H_{11}O_5NS$  1) 1-Methylamido-9,10-Anthrachinon-5-Sulfonsäure (*B.* 37, 70 *C.* 1904 [1] 666).
- 2) 1-Methylamido-9,10-Anthrachinon-8-Sulfonsäure (*B.* 37, 70 *C.* 1904 [1] 666).
- 3)  $\beta$ -Methylamido-9,10-Anthrachinon-1-Sulfonsäure. *Na* (D.R.P. 144634 *C.* 1903 [2] 750).
- $C_{15}H_{11}O_6NS$  1) 4-Methylamido-1-Oxy-9,10-Anthrachinon-7-Sulfonsäure (D.R.P. 155440 *C.* 1904 [2] 1356).

- $C_{15}H_{12}ON_2S$  \*2) 1-Acetylphenylamidobenzthiazol. Sm. 162—163° (B. 34, 3138; B. 36, 3128 C. 1903 [2] 1070).
- $C_{15}H_{12}ON_2Se$  1) Diphenylamid d. Selencyanessigsäure. Sm. 103° (Ar. 241, 221 C. 1903 [2] 104).
- $C_{15}H_{12}ON_2Br$  1) 3-Oxy-2-[3-Brom-2-Amidophenyl]-6- oder 7-Methyl-1,4-Benz-diazin. Sm. 243° (B. 35, 4334 C. 1903 [1] 293).
- $C_{15}H_{12}O_2NCl$  5) Methyl-3-Chlor-4-Benzoylamidophenylketon. Sm. 132° (Soc. 85, 342 C. 1904 [1] 1404).
- 6) Methyl-4-Benzoylchloramidophenylketon. Sm. 77° (C. 1903 [1] 832).
- 7) 2-Acetylchloramidodiphenylketon. Sm. 102° (C. 1903 [1] 1137).
- 8) 4-Acetylchloramidodiphenylketon. Sm. 124° (C. 1903 [1] 1137).
- 9) 5-Chlor-2-Acetylamidodiphenylketon. Sm. 117° (Soc. 85, 344 C. 1904 [1] 1405).
- 10) 3-Chlor-4-Acetylamidodiphenylketon. Sm. 99,5° (Soc. 85, 342 C. 1904 [1] 1405).
- 11) Amid d.  $\alpha$ -Benzoyl- $\alpha$ -[4-Chlorphenyl]essigsäure. Sm. 196° (J. pr. [2] 67, 384 C. 1903 [1] 1356).
- $C_{15}H_{12}O_2NBr$  5) 2-Acetylbromamidodiphenylketon. Sm. 121° (C. 1903 [1] 1137).
- 6) 4-Acetylbromamidodiphenylketon. Sm. 151° (C. 1903 [1] 1137).
- $C_{15}H_{12}O_2NBr_3$  1) N-Acetylphenyl-2,4,6-Tribrom-3-Oxybenzylamin. Sm. 180° (A. 332, 182 C. 1904 [2] 209).
- 2) Acetat d. Phenyl-2,4,6-Tribrom-3-Oxybenzylamin. Sm. 99—100° (A. 332, 181 C. 1904 [2] 209).
- $C_{15}H_{12}O_2N_2S$  1) 2-Acetylido-4-Keto-3-[2-Naphtyl]tetrahydrothiazol. Sm. 139 bis 140° (C. 1903 [2] 110).
- 2) 2-[2-Naphtyl]imido-4-Keto-3-Acetyltetrahydrothiazol. Sm. 142 bis 143° (C. 1903 [2] 110).
- $C_{15}H_{12}O_3NCl$  1)  $\beta$ -Oximido- $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylpropionsäure. Sm. 153° (J. pr. [2] 67, 385 C. 1903 [1] 1357).
- $C_{15}H_{12}O_4N_2Br_2$  1) N-Acetyl-3-Nitrophenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 158 bis 159° (A. 332, 189 C. 1904 [2] 210).
- 2) N-Acetyl-4-Nitrophenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 146 bis 150° (A. 332, 190 C. 1904 [2] 210).
- $C_{15}H_{12}O_4N_3Br$  3)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Brom-3-Nitro-2-Oxybenzyliden]-hydrazin. Sm. 248° (B. 37, 3937 C. 1904 [2] 1596).
- 4) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Brom-3-Nitro-2-Oxybenzyliden]-hydrazin. Sm. 209—210° (B. 37, 3936 C. 1904 [2] 1596).
- $C_{15}H_{12}O_6N_2S$  1) 4-Oxyazobenzol-3-Akrylsäure-4'-Sulfonsäure (B. 37, 4127 C. 1904 [2] 1735).
- $C_{15}H_{12}O_6N_3Cl$  1) Acetat d. p-Chlor-4,6-Dinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 128° (B. 37, 2093 C. 1904 [2] 34).
- $C_{15}H_{12}NCl_3S$  1) 4-Methylphenyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha$ -[4-Merkaptophenyl]-imidoäthan. Sm. 107—108° (J. pr. [2] 68, 271 C. 1903 [2] 993).
- $C_{15}H_{12}NBrMg$  1) Chinolinphenylmagnesiumbromid (B. 37, 3091 C. 1904 [2] 995).
- $C_{15}H_{12}N_2Br_2S_2$  1) Methyläther d. 2,2'-Dibrom-5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 196° u. Zers. (J. pr. [2] 67, 237 C. 1903 [1] 1263).
- $C_{15}H_{12}ONBr_4$  2) 3,4,5,6-Tetrabrom-4'-Dimethylamido-2-Oxydiphenylmethan. Sm. 121—123°. HBr (A. 334, 327 C. 1904 [2] 988).
- $C_{15}H_{12}ONS_2$  2) 2-Thiocarbonyl-4-Keto-3-Allyl-5-Cinnamylidentetrahydrothiazol. Sm. 166° (M. 24, 514 C. 1903 [2] 837).
- $C_{15}H_{12}ON_3S$  4) 5-Thiocarbonyl-3-Keto-4-Phenyl-1-Benzyltetrahydro-1,2,4-Triazol. Sm. 218° (B. 37, 2336 C. 1904 [2] 315).
- 5) 5-Merkapto-4-Phenyl-1-Benzyl-4,5-Dihydro-1,2,4-Triazol-3,5-Oxyd. Sm. 147° (B. 37, 2335 C. 1904 [2] 315).
- $C_{15}H_{12}ON_2Br$  2) Äthyläther d. 6-Oxy-1-[2-Bromphenyl]benzimidazol. Pikrat (B. 36, 3867 C. 1904 [1] 92).
- 3) Äthyläther d. 6-Oxy-1-[3-Bromphenyl]benzimidazol. Sm. 130°. Pikrat (B. 36, 3869 C. 1904 [1] 92).
- $C_{15}H_{12}ON_3S$  4) 2-Phenylimido-6-Keto-4-Phenyl-3,4,5,6-Tetrahydro-1,3,4-Thiodiazin? Sm. 201° u. Zers. (B. 36, 3888 C. 1904 [1] 27).
- $C_{15}H_{12}O_2NBr_2$  \*1) Phenyl-3,5-Dibrom-2-Oxybenzylamid d. Essigsäure. Sm. 152° (A. 332, 177 C. 1904 [2] 209).

- $C_{15}H_{13}O_2N_2Br$  10)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Brom-2-Oxybenzyliden]hydrazin. Sm. 152° (B. 37, 3935 C. 1904 [2] 1596).
- 11) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Brom-2-Oxybenzyliden]hydrazin. Sm. 138° (B. 37, 3934 C. 1904 [2] 1596).
- $C_{15}H_{13}O_3NBr_2$  1) Methyl ester d. 3-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 120–123° (A. 332, 197 C. 1904 [2] 210).
- $C_{15}H_{13}O_3N_2Br$  3) Bromderivat d. Verb.  $C_{15}H_{14}O_3N_2$ . Sm. 212° (J. pr. [2] 70, 374 C. 1904 [2] 1566).
- $C_{15}H_{13}O_4N_4Cl$  1) 2-Chlor-6-Nitro-2-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydro-1,3-Benzodiazin (B. 36, 3121 C. 1903 [2] 1132).
- $C_{15}H_{13}N_2BrS_2$  1) Methyläther d. 2-Brom-5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. +  $Br_2$  (Sm. 172°) (J. pr. [2] 67, 237 C. 1903 [1] 1263).
- $C_{15}H_{13}N_2JS_2$  1) Methyläther d. 2-Jod-5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 188°. +  $J_2$  (J. pr. [2] 67, 222 C. 1903 [2] 1261).
- $C_{15}H_{14}ONCl$  13) Phenylbenzylamid d. Essigsäure. Sm. 80–81° (Ar. 241, 218 C. 1903 [2] 104).
- $C_{15}H_{14}ONBr_3$  1) 2,3,5-Tribrom-4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 127°. HBr (A. 334, 331 C. 1904 [2] 988).
- $C_{15}H_{14}ON_2S$  \*6) 6-Aethyläther d. 2-Merkapto-6-Oxy-1-Phenylbenzimidazol. Sm. 229°. Hg (B. 36, 3848 C. 1904 [1] 89).
- 11) Benzyläther d. Benzoylimidoamidomerkaptomethan. Sm. 161° (Am. 29, 76 C. 1903 [1] 523).
- $C_{15}H_{14}ON_2S_2$  \*2) Monomethyläther d.  $\alpha$ -Dimerkaptomethylen- $\alpha$ -Benzoyl- $\beta$ -Phenylhydrazin. Sm. 201–202° (J. pr. [2] 67, 223 C. 1903 [1] 1261).
- $C_{15}H_{14}ON_4S_2$  1) s-Di[Phenylamidothioformyl]harnstoff. Sm. 166° (Soc. 83, 91 C. 1903 [1] 230, 447).
- $C_{15}H_{14}O_2NCl$  3) 4-Chlor-1-[Acetyl-2-Oxybenzyl]amidobenzol. Sm. 95° (Ar. 240, 685 C. 1903 [1] 395).
- $C_{15}H_{14}O_2NBr$  2) 4-Brom-1-[Acetyl-2-Oxybenzyl]amidobenzol. Sm. 108° (Ar. 240, 686 C. 1903 [1] 395).
- 3) Phenylamidoformiat d. 5-Brom-4-Oxy-1,3-Dimethylbenzol. Sm. 138–139° (B. 36, 2876 Ann. C. 1903 [2] 834).
- $C_{15}H_{14}O_2N_2S$  7) Methyl ester d. Diphenylthioallophansäure. Sm. 105° (Soc. 83, 557 C. 1903 [1] 1123).
- 8) 4-[4-Methylphenyl]merkaptophenylamid d. Oxaminsäure (p-Thiotolylphenyloxamid). Sm. 222° (J. pr. [2] 68, 268 C. 1903 [2] 993).
- $C_{15}H_{14}O_2N_2Cl$  2) 6-Chlor-3-Nitro-4-Dimethylamido-1-Phenylimidomethylbenzol. Sm. 118° (B. 37, 865 C. 1904 [1] 1207).
- $C_{15}H_{14}O_3N_2S$  2) 2-Naphtylacetylthiohydantoinsäure. Sm. 167–173° (C. 1903 [2] 110).
- $C_{15}H_{14}O_4N_4S$  \*2) s-Di[2-Nitro-4-Methylphenyl]thioharnstoff. Sm. 207° (B. 36, 1139 C. 1903 [1] 1220).
- $C_{15}H_{14}O_5N_2S$  1) Aldehyd d. 4-Nitro-5-Dimethylamidodiphenylsulfon-2-Carbonsäure. Sm. 196° (B. 37, 866 C. 1904 [1] 1207).
- $C_{15}H_{14}O_6N_2S$  1) 4-Oxyazobenzol-2-Propionsäure-4'-Sulfonsäure (B. 37, 4131 C. 1904 [2] 1735).
- 2) 4-Oxyazobenzol-3-Propionsäure-4'-Sulfonsäure (B. 37, 4130 C. 1904 [2] 1735).
- 3) 6-Oxyazobenzol-3-Propionsäure-4'-Sulfonsäure (B. 37, 4131 C. 1904 [2] 1736).
- $C_{15}H_{14}N_3ClS$  1) Verbindung (aus  $\beta$ -Phenylamido- $\alpha$ -Phenylthioharnstoff u. Acetylchlorid). Sm. 218° (J. pr. [2] 67, 253 C. 1903 [1] 1265).
- $C_{15}H_{14}N_3JS$  1) Methyläther d. 5-Jod-3-Merkapto-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 243° (J. pr. [2] 67, 250 C. 1903 [1] 1264).
- $C_{15}H_{15}ONBr_2$  4) 3,5-Dibrom-4'-Dimethylamido-4-Oxydiphenylmethan. Fl. HBr (A. 334, 338 C. 1904 [2] 989).
- $C_{15}H_{15}ONS$  14) 4'-Acetylamido-4-Methyldiphenylsulfid. Sm. 108° (J. pr. [2] 68, 267 C. 1903 [2] 993).
- 15) 4-Aethoxyphenylamid d. Benzolthiocarbonsäure. Sm. 127° (B. 37, 876 C. 1904 [1] 1004).

- $C_{15}H_{15}O_2NS$  \*1) 1-Phenylsulfon-1,2,3,4-Tetrahydrochinolin. Sm. 54—55° (*B.* 36, 2706 *C.* 1903 [2] 829).  
 5) 4'-Acetylamido-4-Methyldiphenylsulfoxyd. Sm. 182,5° (*J. pr.* [2] 68, 277 *C.* 1903 [2] 994).
- $C_{15}H_{15}O_2N_2S$  4)  $\alpha\gamma$ -Diphenylthiosemicarbazidoessigsäure. Sm. 195° u. Zers. (*B.* 36, 3887 *C.* 1904 [1] 27).
- $C_{15}H_{15}O_2N_4Cl$  1) 6-Chlor-3-Nitro-4-Dimethylamidobenzylidenphenylhydrazin. Sm. 166° (*B.* 37, 865 *C.* 1904 [1] 1207).
- $C_{15}H_{15}O_3NS$  9) Methyl-4-[4-Methylphenylsulfon]amidophenylketon. Sm. 203° (*Soc.* 85, 391 *C.* 1904 [1] 1404).  
 10) Aethyl-4-Phenylsulfonamidophenylketon. Sm. 165° (*Soc.* 85, 394 *C.* 1904 [1] 1404).  
 11) 4'-Acetylamido-4-Methyldiphenylsulfon. Sm. 195° (*J. pr.* [2] 68, 277 *C.* 1903 [2] 994).
- $C_{15}H_{15}O_5NS$  4) 2,4-Dimethyldiphenylamin-2'-Carbonsäure- $\beta$ -Sulfonsäure. Na (*D. R. P.* 146102 *C.* 1903 [2] 1152).  
 5) 4-Dimethylamido-2-Oxydiphenylketon-3'-Sulfonsäure. K (*B.* 37, 208 *C.* 1904 [1] 665).
- $C_{15}H_{15}O_6N_4Br$  1) 3-Brom-2,4,6-Trinitro-1-Methylbenzol + Dimethylamidobenzol. Sm. 120° (*B.* 37, 178 *C.* 1904 [1] 653).
- $C_{15}H_{16}ONJ$  1) Jodmethylat d. 1-Oxy-2-[2-Pyridyl]-2,3-Dihydroinden. Sm. 130° (*B.* 36, 1656 *C.* 1903 [2] 39).
- $C_{15}H_{16}ON_2S$  4)  $\alpha$ -Phenyl- $\beta$ -[ $\beta$ -Oxy- $\beta$ -Phenyläthyl]thioharnstoff. Sm. 131—132° (*B.* 37, 2483 *C.* 1904 [2] 420).  
 5) Aethyläther d. 3-Oxy- $\beta$ -Diphenylthioharnstoff. Sm. 138,5° (*B.* 36, 4102 *C.* 1904 [1] 271).  
 6) 4-Methylphenyläther d. 4-Merkapto-2-Methylphenylharnstoff. Sm. 175° (*J. pr.* [2] 68, 285 *C.* 1903 [2] 995).
- $C_{15}H_{16}O_5N_2S$  3)  $\alpha$ -Phenylsulfon- $\beta$ -Aethyl- $\beta$ -Phenylharnstoff. Sm. 123,2° (*B.* 37, 695 *C.* 1904 [1] 1074).  
 4) 1-[4-Aethylamidobenzyliden]amidobenzol-4-Sulfonsäure (*B.* 37, 858 *C.* 1904 [1] 1206).
- $C_{15}H_{16}O_5N_2S$  1) d- $\alpha$ -[2-Naphtylsulfonamidoacetyl]amidopropionsäure + H<sub>2</sub>O. Sm. 154—155° (wasserfrei) (*B.* 36, 2594 *C.* 1903 [2] 618).  
 2) r- $\alpha$ -[2-Naphtylsulfonamidoacetyl]amidopropionsäure ( $\beta$ -Naphtylsulfoglycylalanin). Sm. 172—173° (*B.* 36, 2106 *C.* 1903 [1] 1304).  
 3)  $\alpha$ -d-[2-Naphtylsulfonamidopropionyl]amidoessigsäure. Sm. 180,5 bis 181,5° (*B.* 36, 2595 *C.* 1903 [2] 618).
- $C_{15}H_{17}O_2NS$  5) Piperidid d. Naphtalin-2-Sulfonsäure. Sm. 135—136° (*B.* 37, 3250 *C.* 1904 [2] 996).
- $C_{15}H_{17}O_2N_2P$  1) Phenylmonamid d. 1,2,3,4-Tetrahydro-1-Chinolyolphosphinsäure (*A.* 326, 198 *C.* 1903 [1] 821).
- $C_{15}H_{18}O_4N_4S$  1) 2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Phenyltetrahydroimidazol-1- $\alpha$ -Nitrosamidoisobuttersäure. Sm. 166° (*C.* 1904 [2] 1028).
- $C_{15}H_{18}O_6N_2S$  1) 2-Naphtylsulfonhydrazon d. l-Arabinose. Zers. bei 175° (*C.* 1904 [2] 1494).
- $C_{15}H_{19}ON_2J$  /\*1) Jodmethylat d. 4-Dimethylamido-4'-Oxydiphenylamin. Sm. 218° (*J. pr.* [2] 69, 166 *C.* 1904 [1] 1268).  
 2) Jodmethylat d. 4-Dimethylamido-3'-Oxydiphenylamin. Sm. 199,5—200° (*J. pr.* [2] 69, 236 *C.* 1904 [1] 1269).
- $C_{15}H_{19}O_8N_2Cl_3$  1) Verbindung (*C.* 1903 [2] 19).
- $C_{15}H_{19}O_8N_2Br$  1) Isoamyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 65° (*J. pr.* [2] 45, 188). — IV, 266.
- $C_{15}H_{19}O_3N_3S$  1) 2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Phenyltetrahydroimidazol-1- $\alpha$ -Amidoisobuttersäure. Sm. 153° (*C.* 1904 [2] 1028).
- $C_{15}H_{20}ON_2S_2$  1) Verbindung (aus Taurin u. Benzoesäureanhydrid). Sm. 175° (*C.* 1903 [2] 986).
- $C_{15}H_{20}ON_3P$  1) Propylamid-Di[Phenylamid] d. Phosphorsäure. Sm. 146° (*A.* 326, 173 *C.* 1903 [1] 819).
- $C_{15}H_{20}O_3NBr$  1)  $\alpha$ -[ $\alpha$ -Bromisocapronyl]amido- $\beta$ -Phenylpropionsäure. Sm. 119 bis 123° (*B.* 37, 3306 *C.* 1904 [2] 1305).
- $C_{15}H_{20}O_4NBr$  1) 1- $\alpha$ -[ $\alpha$ -Bromisocapronyl]amido- $\alpha$ -[4-Oxyphenyl]propionsäure. Sm. 139—140° (*B.* 37, 2497 *C.* 1904 [2] 425).

- $C_{15}H_{20}N_3SP$  1) Propylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 116° (A. 326, 204 C. 1903 [1] 821).
- $C_{15}H_{21}ONBr_2$  1) Methyläther d. 1-[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]hexahydropyridin. Sm. 49–51° (A. 334, 304 C. 1904 [2] 985).
- $C_{15}H_{21}O_6ClSi$  1) Triacetylacetonysiliciumchlorid. HCl, (HCl, FeCl<sub>3</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 36, 926 C. 1903 [1] 1025).
- $C_{15}H_{21}N_2JS$  1) 2-Jodisobutylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Methyläther. Sm. 189–191° (A. 331, 227 C. 1904 [1] 1220).
- 2) 2-Jodmethylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Iso-butyläther. Sm. 117° (A. 331, 202 C. 1904 [1] 1218).
- $C_{15}H_{22}ON_5P$  1) Propylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 151° (A. 326, 175 C. 1903 [1] 819).
- $C_{15}H_{24}ONCl$  \*1) Caryophyllennitrosylchlorid. Sm. 158° (Ar. 241, 38 C. 1903 [1] 712).
- $C_{15}H_{25}O_8NS$  3) Aethylamid d.  $\delta$ -Oxy- $\delta$ -Phenylheptan- $\delta^2$ -Sulfonsäure. Sm. 117 bis 118° (B. 37, 3261 C. 1904 [2] 1031).
- $C_{15}H_{30}ON_5P$  \*1) 1-Tripiperidinphosphinoxid. Sm. 75–76° (A. 326, 200 C. 1903 [1] 821). — \*IV, 10.
- $C_{15}H_{30}N_3SP$  \*1) 1-Tripiperidylphosphinsulfid. Sm. 120° (A. 326, 219 C. 1903 [1] 822). — \*IV, 10.
- $C_{15}H_{36}N_3SP$  1) Tri[Amylamid] d. Thiophosphinsäure. Fl. (A. 326, 208 C. 1903 [1] 821).

## — 15 V —

- $C_{15}H_{11}O_2NCl_2Br_2$  1) N-Acetyl- $\beta$ -Dichlorphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 141,5–143,5° (A. 332, 188 C. 1904 [2] 210).
- $C_{15}H_{12}O_2NClBr_2$  1) N-Acetyl-2-Chlorphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 129–130° (A. 332, 188 C. 1904 [2] 210).
- $C_{15}H_{13}ON_2BrS$  1) 6-Aethyläther d. 2-Merkapto-6-Oxy-1-[3-Bromphenyl]benzimidazol. Sm. 201° (B. 36, 3869 C. 1904 [1] 92).
- $C_{15}H_{14}O_3NClS$  1) Methyl-4-[4-Methylphenylsulfon]chloramidophenylketon. Sm. 93° (Soc. 85, 391 C. 1904 [1] 1404).
- 2) Aethyl-4-Phenylsulfonchloramidophenylketon. Sm. 81° (Soc. 85, 394 C. 1904 [1] 1404).
- $C_{15}H_{15}ON_2Br_2S$  1) Verbindung (aus Acetyl-s-Diphenylthioharnstoff). Sm. 167° u. Zers. (B. 34, 3138; B. 35, 3128 C. 1903 [2] 1070).
- $C_{15}H_{16}ON_2ClP$  1) Phenylmonamid d. 1,2,3,4-Tetrahydro-1-Chinolylphosphinsäuremonochlorid. Sm. 174–175° (A. 326, 198 C. 1903 [1] 821).

**C<sub>16</sub>-Gruppe.**

- $C_{16}H_{12}$  \*2) 2-Phenylnaphtalin. Sm. 101–102° (B. 36, 3910 C. 1903 [2] 1439; B. 36, 4010 C. 1904 [1] 176).
- \*9) Kohlenwasserstoff (aus Naphtalin). Sm. 180–181° (Soc. 85, 220 C. 1904 [1] 656, 939).
- $C_{16}H_{14}$  \*2)  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien. Sm. 149° (C. r. 135, 1347 C. 1903 [1] 328).
- \*6) 2,6-Dimethylantracen. Sm. 215–216° (Soc. 85, 216 C. 1904 [1] 656, 939).
- $C_{16}H_{16}$  \*9)  $\alpha\beta$ -Di 4-Methylphenyläthen (R. 21, 453 C. 1903 [1] 503).
- \*14)  $\alpha\alpha$ -Diphenyl- $\alpha$ -Buten. Sd. 286°<sub>760</sub> (B. 37, 1451 C. 1904 [1] 1352).
- 15)  $\alpha\beta$ -Diphenyl- $\alpha$ -Buten. Sm. 57°; Sd. 296–297° (B. 37, 1453 C. 1904 [1] 1352).
- 16)  $\alpha\beta$ -Di[3-Methylphenyl]äthen. Sm. 55–56° (R. 21, 456 C. 1903 [1] 503).
- $C_{16}H_{18}$  \*11)  $\alpha\beta$ -Di[3-Methylphenyl]äthan. Sd. 298° (R. 21, 457 C. 1903 [1] 503).
- \*21)  $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 81–82° (R. 21, 453 C. 1903 [1] 503).
- \*23)  $\alpha\alpha$ -Diphenylbutan. Sm. 27°; Sd. 265–266°<sub>761</sub> (B. 37, 1452 C. 1904 [1] 1352).
- 25)  $\alpha\beta$ -Diphenylbutan. Sd. 288–289° (B. 37, 1454 C. 1904 [1] 1353).
- 26) 2,4,2',4'-Tetramethylbiphenyl. Sm. 41°; Sd. 288°<sub>732</sub> (A. 332, 45 C. 1904 [2] 40).
- 27) 2,5,2',5'-Tetramethylbiphenyl. Sm. 50°; Sd. 284°<sub>732</sub> (A. 332, 46 C. 1904 [2] 40).
- $C_{16}H_{24}$  3)  $\alpha$ -[2,4,6-Trimethylphenyl]- $\alpha$ -Hepten. Sd. 270–272° (B. 37, 931 C. 1904 [1] 1209).

- $C_{16}H_{26}$  3) 2-Heptyl-1,3,5-Trimethylbenzol. *Sd.* 271—272°<sub>750</sub> (*B.* 37, 1720 *C.* 1904 [1] 1489).  
 $C_{16}H_{32}$  4)  $\beta\beta$ -Dimethyl- $\varepsilon$ -Isoamyl- $\delta$ -Nonen. *Sd.* 114—115°<sub>10</sub> (*C. r.* 136, 816 *C.* 1903 [1] 1077).

## — 16 II —

- $C_{16}H_8O_5$  \*2) Styrogallol. *K (Soc.* 83, 139 *C.* 1903 [1] 89, 466).  
 $C_{16}H_{10}O$  3)  $\beta\beta$ -Phenylennaphthylenoxyd (Brasan). *Sm.* 202° (*B.* 36, 2199 *C.* 1903 [2] 381).  
 $C_{16}H_{10}O_3$  \*7) Anhydrid d. Diphenylmaleinsäure. *Sm.* 156° (*Soc.* 83, 289 *C.* 1903 [1] 877; *B.* 36, 2652 *C.* 1903 [2] 725).  
 $C_{16}H_{10}O_4$  19) Methylenäther d. 2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. *Sm.* 192° (*B.* 30, 1083; 32, 316). — \*III, 531.  
 $C_{16}H_{10}O_5$  \*3) Dilakton d. Di[ $\alpha$ -Oxybenzyl]äther-2,2'-Dicarbonsäure. *Sm.* 221 bis 223° (*M.* 25, 499 *C.* 1904 [2] 325).  
 5) 2-Aldehydobenzoat d. 1-Dioxyethylbenzol-2-Carbonsäure-1,2-Lakton. *Sm.* 202° (*M.* 25, 499 *C.* 1904 [2] 325).  
 $C_{16}H_{10}O_6$  6) 3,4-Methylenäther d. 5,6-Dioxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. *Sm.* 221° (*B.* 29, 2435). — \*III, 533.  
 7) 1,3-Phenyleneester d. Furan-2-Carbonsäure. *Sm.* 128—129° (*B.* 37, 2952 *C.* 1904 [2] 993).  
 $C_{16}H_{10}O_8$  4) Biphenyl-3,4,3',4'-Tetracarbonsäure. *Sm.* noch nicht bei 250° (*B.* 26, 2486).  
 $C_{16}H_{10}N_2$  \*5) Nitril d.  $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure. *Sm.* 157° (160°) (*C.* 1903 [2] 493; *B.* 36, 2652 *C.* 1903 [2] 725; *B.* 36, 2862 *C.* 1903 [2] 1129).  
 $C_{16}H_{10}N_6$  C 67,1 — H 3,5 — N 29,4 — M. G. 286.  
 1) Fluorobin. *Sm.* noch nicht bei 300° (*B.* 36, 4048 *C.* 1904 [1] 184; *B.* 36, 4051 *C.* 1904 [1] 185).  
 $C_{16}H_{11}N$  \*5) isom. Phenyl- $\beta$ -Naphthylcarbazon. *Sm.* 134—135°; *Sd.* 448°<sub>760</sub>. Pikrat (*B.* 31, 1697; *Soc.* 83, 271 *C.* 1903 [1] 883; *A.* 332, 101 *C.* 1904 [1] 1571).  
 $C_{16}H_{12}O_2$  \*3) 4-Methylen-2-[4-Oxyphenyl]-1,4-Benzpyran (Phenacetin) (*B.* 36, 732 *C.* 1903 [1] 840).  
 \*24) stab. Lakton d.  $\gamma$ -Oxy- $\beta\gamma$ -Diphenylpropen- $\alpha$ -Carbonsäure. *Sm.* 151,5° (*Soc.* 83, 292 *C.* 1903 [1] 877; *B.* 37, 3126 *C.* 1904 [2] 1042).  
 47) isom. Lakton d.  $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropen- $\gamma$ -Carbonsäure. *Sm.* 284 bis 286° (*Soc.* 85, 1362 *C.* 1904 [2] 1646).  
 $C_{16}H_{12}O_3$  40) Methylester d. 3-Oxyphenanthren-2-Carbonsäure. *Sm.* 171° (*B.* 35, 4428 *C.* 1903 [1] 334).  
 41) Methylester d. 2-Oxyphenanthren-3-Carbonsäure. *Sm.* 126° (*B.* 35, 4428 *C.* 1903 [1] 334).  
 $C_{16}H_{12}O_4$  \*3) 7-Oxy-4-Methylen-2-[2,4-Dioxyphenyl]-1,4-Benzpyran + H<sub>2</sub>O (Resacetin). HCl +  $\frac{1}{2}$ H<sub>2</sub>O, Pikrat (*B.* 36, 733 *C.* 1903 [1] 839; *B.* 37, 363 *C.* 1904 [1] 671).  
 \*32) Diphenylester d. Fumarsäure. *Sd.* 219°<sub>14</sub> (*B.* 35, 4086 *C.* 1903 [1] 75).  
 \*43) Aethylester d. Naphtaronylessigsäure (*Soc.* 83, 1130 *C.* 1903 [2] 1060).  
 44) Methyläther d.  $\alpha\beta\gamma$ -Tri keto- $\alpha$ -Phenyl- $\gamma$ -[4-Oxyphenyl]propan. *Sm.* 65° (*B.* 37, 1535 *C.* 1904 [1] 1609).  
 45) 1,5-Dioxy-2,6-Dimethyl-9,10-Anthrachinon. *Sm.* 224—225° (*Soc.* 83, 1333 *C.* 1904 [1] 100).  
 46) 1,7-Dioxy-2,6-Dimethyl-9,10-Anthrachinon. *Sm.* noch nicht bei 300° (*Soc.* 83, 1331 *C.* 1904 [1] 100).  
 47) 3,7-Dioxy-2,6-Dimethyl-9,10-Anthrachinon. *Sm.* 232° (*Soc.* 83, 1333 *C.* 1904 [1] 100).  
 48) Dimethyläther d. 1,5-Dioxy-9,10-Anthrachinon. *Sm.* 230° (D.R.P. 77818). — \*III, 305.  
 49) Dimethyläther d. 1,8-Dioxy-9,10-Anthrachinon. *Sm.* 215° (D.R.P. 77818). — \*III, 307.  
 50) Dimethyläther d. 2,7-Dioxy-9,10-Anthrachinon. *Sm.* 215° (D.R.P. 143858 *C.* 1903 [2] 404).

- C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>**
- 51) Dimethyläther d. 4,5-Dioxy-9,10-Phenanthrenchinon. Sm. 190 bis 191° (B. 36, 3751 C. 1904 [1] 38).
  - 52) 2-Keto-5,6-Dioxy-1-[4-Methylbenzyliden]-1,2-Dihydrobenzofuran. Sm. 276° (B. 37, 825 C. 1904 [1] 1152).
  - 53) Monomethyläther d. 5,6-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran. Sm. 158° (B. 29, 2432). — \*III, 532.
  - 54) 6-Methyläther d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 204 bis 205° (B. 37, 775 C. 1904 [1] 1155).
  - 55) 7-Methyläther d. 3,7-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 180° (B. 37, 1181 C. 1904 [1] 1275).
  - 56) 3,4-Dioxyphenanthren-3-Methyläther-9-Carbonsäure. Sm. 264° (B. 35, 4414 C. 1903 [1] 344).
  - 57) Äthylester d. 1,2- $\alpha$ -Naphtopyron-4-Carbonsäure. Sm. 145—146° (B. 36, 1968 C. 1903 [2] 377).
  - 58) Äthylester d. 3,4- $\beta$ -Naphtopyron-2-Carbonsäure (Ac. d.  $\beta$ -Naphtocumarin- $\alpha$ -Carbonsäure). Sm. 115° (B. 36, 1971 C. 1903 [2] 377).
  - 59) Diphenylester d. Maleinsäure. Sm. 73°; Sd. 226°<sub>15</sub> (B. 35, 4086 C. 1903 [1] 75).
- C<sub>16</sub>H<sub>12</sub>O<sub>5</sub>**
- \*3) Brasileïn (B. 36, 400 C. 1903 [1] 587; B. 36, 3951 C. 1904 [1] 170; M. 25, 885 C. 1904 [2] 1313).
  - \*25) isom. Dimethyläther d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 159 bis 160°. Na, Li (M. 23, 1014 C. 1903 [1] 290).
  - 26) 1'-Methyläther d. 2-Keto-5,6-Dioxy-1-[4-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 252° (B. 37, 825 C. 1904 [1] 1152).
  - 27) isom. Monomethyläther d. Emodin. Sm. 200° (Soc. 83, 26 C. 1904 [1] 100).
  - 28) 4,7-Dioxy-2-Phenyl-1,4-Benzpyran-4-Carbonsäure. Pikrat (B. 36, 1947 C. 1903 [2] 296).
- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>**
- \*4) 2'-Methyläther d. 3,5,7-Trioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Kämpferid). K + H<sub>2</sub>O (Soc. 83, 136 C. 1903 [1] 89, 466; B. 37, 2096 C. 1904 [2] 121).
  - 22) Dimethyläther d. 1,3,5,7-Tetraoxy-9,10-Anthrachinon. Sm. 280 bis 283° (D.R.P. 139424 C. 1903 [1] 678).
  - 23) 1,8-Lakton d. 4- oder -5-Acetyl-1-Acetoxyloxymethylnaphtalin-8-Carbonsäure. Sm. 183° (A. 327, 90 C. 1903 [1] 1228).
- C<sub>16</sub>H<sub>12</sub>O<sub>7</sub>**
- 5) Cocacetin + 3H<sub>2</sub>O. Sm. 260—265° (wasserfrei) (J. pr. [2] 66, 408 C. 1903 [1] 527).
- C<sub>16</sub>H<sub>12</sub>N<sub>2</sub>**
- \*14) Nitril d.  $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 224° (Soc. 83, 998 C. 1903 [2] 373, 666; B. 37, 4067 C. 1904 [2] 1651).
  - \*17) 3,6-Diphenyl-1,2-Diazin (B. 36, 496 C. 1903 [1] 653).
  - 20) Nitril d.  $\alpha\beta$ -Diphenyläthan- $\alpha\alpha$ -Dicarbonsäure. Sm. 97—98° (Am. 32, 129 C. 1904 [2] 954).
- C<sub>16</sub>H<sub>12</sub>N<sub>4</sub>**
- 5) bim. Crotonaldazin. Sm. 95—100° (M. 24, 440 C. 1903 [2] 617).
  - 6) Nitril d.  $\alpha\beta$ -Di[2-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. 265° (A. 332, 284 C. 1904 [2] 702).
  - 7) Nitril d.  $\alpha\beta$ -Di[4-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. oberh. 300° (A. 332, 280 C. 1904 [2] 701).
- C<sub>16</sub>H<sub>13</sub>N**
- \*2) 2-Phenylamidonaphtalin (C. 1904 [1] 1013).
  - \*8) 2-Methyl-4-Phenylchinolin. Sd. 200—203°<sub>20</sub> (B. 36, 2456 C. 1903 [2] 670).
  - \*18) 1-Benzylisochinolin. Sd. 211—213°<sub>11</sub>. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 37, 3399 C. 1904 [2] 1317).
  - \*19) 3-Benzylisochinolin. Sm. 104°; Sd. 311°<sub>28</sub>. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), 5(HCl, HgCl<sub>2</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (A. 328, 326 C. 1903 [2] 1074).
  - \*20) 4-Benzylisochinolin. Sm. 117,5—118°; Sd. 238°<sub>28</sub>. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), (2HCl, HgCl<sub>2</sub> + 1/2 H<sub>2</sub>O), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (A. 326, 265 C. 1903 [1] 927).
- C<sub>16</sub>H<sub>14</sub>O**
- \*6)  $\alpha$ -Keto- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten. Sd. 340—345° (C. 1903 [1] 521, 880; M. 25, 431 C. 1904 [2] 336).
  - 19)  $\gamma$ -Keto- $\alpha\beta$ -Diphenyl- $\alpha$ -Buten. Sm. 53—54° (M. 18, 444; 19, 411; 22, 667). — \*III, 185.
  - 20)  $\gamma$ -Keto- $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropen. Sd. 190—192°<sub>28</sub> (Am. 31, 656 C. 1904 [2] 446).

- $C_{16}H_{14}O_2$  \*27) Methyläther d.  $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\gamma$ -Phenylpropen. HCl, HBr (*B.* 37, 1652 *C.* 1904 [1] 1603).  
 39)  $\gamma$ -Keto- $\delta$ -Phenyl- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Buten. Sd. 217—219°<sub>12</sub> (*B.* 37, 498 *C.* 1904 [1] 805).  
 40) 4-Methyl-3-Aethyl-1,2- $\alpha$ -Naphthocumarin ( $\beta$ -Methyl- $\alpha$ -Aethyl- $\alpha$ -Naphthocumarin). Sm. 138° (*B.* 36, 1968 *C.* 1903 [2] 376).  
 41) Acetat d. 2-Oxy- $\alpha\alpha$ -Diphenyläthen. Sd. 172—173°<sub>8</sub> (*B.* 36, 4003 *C.* 1904 [1] 174).
- $C_{16}H_{14}O_3$  \*1) 3,6-Dimethyläther d. 3,4,6-Trioxyphenanthren (Thebaol). Sm. 93 bis 94° (*B.* 35, 4400 *C.* 1903 [1] 341; *B.* 37, 3499 *C.* 1904 [2] 1320).  
 \*11)  $i$ - $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure (*Soc.* 85, 1360 *C.* 1904 [2] 1646).  
 \*12) Desylessigsäure. Sm. 161° (*Soc.* 83, 292 *C.* 1903 [1] 877).  
 \*24) Anhydrid d. Phenylessigsäure (*Ann.* 31, 265 *C.* 1904 [1] 1078).  
 59) Methyläther d. 6-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 141—142° (*B.* 37, 774 *C.* 1904 [1] 1155).  
 60) Methyläther d. 7-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 91° (*B.* 37, 1181 *C.* 1904 [1] 1275).  
 61)  $\gamma$ -Oxy- $\alpha\beta$ -Diphenylpropen- $\gamma$ -Carbonsäure. Sm. 125°. Ag (*B.* 31, 2228, 2235; *B.* 36, 917 *C.* 1903 [1] 1030; *A.* 333, 232 *C.* 1904 [2] 1389). — \*II, 1011.  
 62)  $d$ - $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure. Sm. 176—178° (*Soc.* 85, 1368 *C.* 1904 [2] 1646).  
 63)  $l$ - $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure (*Soc.* 85, 1368 *C.* 1904 [2] 1647).
- $C_{16}H_{14}O_4$  \*9) 2-[4-Aethoxylbenzoyl]benzol-1-Carbonsäure. Sm. 135—136° (*B.* 36 2967 *C.* 1903 [2] 1007).  
 \*16)  $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure. Sm. 231°.  $K_2$  (*B.* 37, 3218 *C.* 1904 [2] 1120).  
 \*21) Dimethylester d. Biphenyl-2,2'-Dicarbonsäure. Sm. 74,5° (*A.* 332, 70 *C.* 1904 [2] 42).  
 \*23) Dimethylester d. Biphenyl-3,3'-Dicarbonsäure. Sm. 104° (*A.* 332, 72 *C.* 1904 [2] 42).  
 \*30) Diphenylester d. Bernsteinsäure. Sm. 121°; Sd. 222,5°<sub>15</sub> (*B.* 35, 4073 *C.* 1903 [1] 73).  
 \*41) Dimethylester d. Biphenyl-4,4'-Dicarbonsäure. Sm. 214° (*A.* 332, 73 *C.* 1904 [2] 43).  
 \*43)  $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. Sm. noch nicht bei 320°. ( $NH_4$ )<sub>2</sub>, Ba, Ag<sub>2</sub> (*B.* 37, 3215 *C.* 1904 [2] 1120).  
 \*48) Di[4-Methylphenylester] d. Oxalsäure (D.R.P. 137584 *C.* 1903 [1] 111).  
 54)  $\beta$ -Oxy- $\beta$ -Phenylakryl-3-Methoxyphenyläthersäure. Sm. 110° (*Soc.* 83, 1134 *C.* 1903 [2] 1060).  
 55) Diacetat d. 3,4-Dioxybiphenyl. Sm. 77—77,5° (*Ann.* 29, 128 *C.* 1903 [1] 705).
- $C_{16}H_{14}O_5$  \*1) Brasilin (*B.* 36, 840 *C.* 1903 [1] 973).  
 20) 4'-Methoxyldiphenylmethan-2,5-Dicarbonsäure. Sm. 265—266° (*B.* 36, 844 *C.* 1903 [1] 971).  
 21)  $\alpha$ -Oxy- $\alpha$ -Phenylessig-4-Aldehydo-2-Methoxyphenyläthersäure (Vanillinmandeläthersäure). Sm. 81—82° (D.R.P. 82924). — \*III, 76.  
 22) 1-Oxymethylbenzol-4-Aldehydo-2-Methoxyphenyläther-4-Carbonsäure. Sm. 195° (D.R.P. 82924). — \*III, 76.  
 23) Aldehyd d. Di[4-Oxybenzyl]äther-3,3'-Dicarbonsäure. Fl. (*B.* 37, 192 *C.* 1904 [1] 660).
- $C_{16}H_{14}O_6$  \*2) Hesperitin (*Soc.* 85, 62 *C.* 1904 [1] 381, 729).  
 \*7) Dehydroadipin (*C.* 1904 [1] 587).  
 21) Peroxyd d. 4-Oxybenzylmethyläther-1-Carbonsäure. Sm. 128° (*B.* 37, 3624 *C.* 1904 [2] 1500).
- $C_{16}H_{14}O_7$  \*1) Lekanorsäure (*Bl.* [3] 31, 615 *C.* 1904 [2] 99; *C.* 1904 [2] 1504).  
 \*3) Gyrophorsäure (*J. pr.* [2] 68, 62 *C.* 1903 [2] 513).
- $C_{16}H_{14}O_8$  4) Pyrogallolsuccinein. HCl (*M.* 20, 450). — \*II, 1224.  
 5) Verbindung (aus Dehydracetsäure). Sm. 214—215° u. Zers. (*G.* 34 [1] 346 *C.* 1904 [2] 195).
- $C_{16}H_{14}N_2$  \*21) 4-Methyl-2-[4-Amidophenyl]chinolin (Flavanilin). Sm. 97° (*C.* 1903 [1] 976).

- $C_{16}H_{14}N_2$  43) 3,6-Diphenyl-*p*-Dihydro-1,2-Diazin. Sm. 202° (B. 36, 496 C. 1903 [1] 653).  
 44) 3,6-Diphenyl-2,5-Dihydro-1,4-Diazin. Sm. 193° (A. 330, 231 C. 1904 [1] 944).  
 45) 1-Methyl-4,5-Diphenylimidazol. Sm. 147° (B. 35, 4139 C. 1903 [1] 295).  
 46) 4-[4-Amidobenzyl]isochinolin. Sm. 160–161° (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (A. 326, 277 C. 1903 [1] 928).  
 $C_{16}H_{14}N_4$  47) Base (aus Acetanilid). Sm. 156°. HCl (D.R.P. 137121 C. 1903 [1] 107).  
 15) 4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 126° (B. 36, 3598 C. 1903 [2] 1378).  
 $C_{16}H_{15}N$  20) 10-Amido-9-Aethylanthracen (A. 330, 174 C. 1904 [1] 891).  
 $C_{16}H_{15}N_3$  17) 5-Phenylamido-3-Methyl-1-Phenylpyrazol. Sm. 120° (124°) (C. 1900 [2] 654; B. 34, 724; B. 36, 3272 C. 1903 [2] 1188).  
 $C_{16}H_{16}O$  \*6)  $\alpha$ -Keto- $\alpha\gamma$ -Diphenylbutan. Sm. 72° (74°); Sd. 200°<sub>18</sub> (A. 330, 232 C. 1904 [1] 944; Am. 31, 655 C. 1904 [2] 446).  
 25)  $\gamma$ -Oxy- $\alpha\gamma$ -Diphenyl- $\alpha$ -Buten. Fl. (Am. 31, 659 C. 1904 [2] 447).  
 $C_{16}H_{16}O_2$  \*12)  $\gamma\gamma$ -Diphenylbuttersäure. Sm. 107° (C. 1904 [1] 1416).  
 \*31) Aethyläther d. 6-Oxy-3-Methyldiphenylketon. Sm. 68° (B. 36, 3892 C. 1904 [1] 93).  
 43) Methyläther d. Oxydimethyldiphenylketon (CH<sub>3</sub>:CH<sub>3</sub>:OH = 1:3:4). Sm. 52,5–53° (G. 33 [2] 63 C. 1903 [2] 996).  
 44) Aethyläther d.  $\gamma$ -Keto- $\alpha$ -[2-Oxy-1-Naphtyl]- $\alpha$ -Buten. Sm. 112° (Bl. [3] 29, 881 C. 1903 [2] 885).  
 45) Aethyläther d. 2-Oxy-2-Phenyl-1,2-Dihydrobenzofuran. Sm. 88–89° (B. 36, 4004 C. 1904 [1] 174).  
 $C_{16}H_{16}O_3$  \*10) Aethylester d.  $\alpha$ -Oxydiphenylessigsäure. Sd. 201°<sub>21</sub> (B. 37, 2766 C. 1904 [2] 708).  
 22)  $\alpha$ -Oxydi[4-Methylphenyl]essigsäure. Sm. 131–132° (C. r. 136, 1201 C. 1903 [2] 22).  
 23) Aldehyd d. 3,4-Dioxybenzol-3-Aethyläther-4-Benzyläther-1-Carbonsäure. Sm. 57° (D.R.P. 85196). — \*III, 75.  
 $C_{16}H_{16}O_4$  26) Methyläther d.  $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 54°; Sd. 312° (B. 36, 227 C. 1904 [1] 659).  
 27) Diäthylester d.  $\delta$ -Phenyl- $\alpha\gamma$ -Butenin- $\alpha\alpha$ -Dicarbonsäure. Fl. (B. 36, 3671 C. 1903 [2] 1313).  
 28) 3-Methoxyl-4-Methylphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 80–81° (D.R.P. 57941). — \*II, 919.  
 29) 2-Methoxyl-4-Methylphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 79–81° (D.R.P. 57941). — \*II, 920.  
 30) 2-Methoxyl-4-Methylphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 95° (D.R.P. 57941). — \*II, 922.  
 $C_{16}H_{16}O_5$  31) Diacetat d. Podophylloresin. Sm. 198° (Soc. 73, 221). — \*III, 474.  
 6) Diacetat d. 5,7-Dioxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran (B. 37, 1800 C. 1904 [1] 1612).  
 7) Diacetat d. 7,8-Dioxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran. Sm. 148° (B. 37, 1799 C. 1904 [1] 1612).  
 $C_{16}H_{16}O_6$  8) Diacetoxylnorcarenearbonsäure. Sm. 216° (B. 36, 3507 C. 1903 [2] 1274).  
 9) Acetat d. Purpurogallintrimethyläther. Sm. 140–143° (Soc. 83, 197 C. 1903 [1] 401, 639).  
 $C_{16}H_{16}O_8$  C 57,1 — H 4,8 — O 38,1 — M. G. 336.  
 1) 1,1,6-Triacetat d. 4,5,6-Trioxyl-2-Aethenyl-1-Dioxymethylbenzol-4,5-Methylenäther. Sm. 124° (B. 36, 1531 C. 1903 [2] 52).  
 $C_{16}H_{16}O_{10}$  2) Pentaacetat d. Pentaoxybenzol. Sm. 165° u. Zers. (B. 37, 123 C. 1904 [1] 586).  
 $C_{16}H_{16}N_2$  33)  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Methylphenyl]propen. Sm. 145° (B. 36, 851 C. 1903 [1] 975).  
 34) Base (aus 2-Amido-5-Oxy-3,7,10-Trimethyl-5,10-Dihydroakridin). Sm. noch nicht bei 250° (Soc. 85, 532 C. 1904 [1] 1525).  
 35) Verbindung (aus 2-Amido-5-Oxy-3,7,10-Trimethyl-5,10-Dihydroakridin) (C. 1904 [1] 677).  
 $C_{16}H_{16}N_4$  13) 6-[4-Dimethylamidobenzyliden]amidoindazol. Sm. 198–199° (B. 37, 2581 C. 1904 [2] 659).

- $C_{16}H_{16}N_6$  4) 3,6-Di[4-Amidobenzyl]-1,2,4,5-Tetrazin. Sm. 166° (B. 35, 3939 C. 1903 [1] 39).
- $C_{16}H_{16}Br_2$  6)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3-Methylphenyl]äthan. Sm. 167—168° (R. 21, 456 C. 1903 [1] 503).
- $C_{16}H_{16}S$  2) Aethyläther d.  $\alpha$ -Merkapto- $\alpha\beta$ -Diphenyläthen. Sd. 190—200°<sub>15</sub> (A. 329, 51 Anm. C. 1903 [2] 1448).
- $C_{16}H_{16}S_2$  4) Cyklodi-o-Xylylendisulfid (Disulfid d. 1,2-Di[Merkaptomethyl]benzol). Sm. 234—236° (B. 36, 186 C. 1903 [1] 467).
- $C_{16}H_{17}N$  \*13) 2-Benzyl-1,2,3,4-Tetrahydroisochinolin. Oxalat (B. 36, 1162 C. 1903 [1] 1186).
- 14)  $\alpha$ -Amido- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (M. 25, 438 C. 1904 [2] 336).
- 15) 4-[4-Aethylbenzyliden]amido-1-Methylbenzol. Sm. 49° (C. r. 136, 558 C. 1903 [1] 832).
- $C_{16}H_{17}N_3$  12) 2-[2-Amidobenzyliden]amido-1-Aethylimidomethylbenzol. Sm. 152—153,5°. 2HCl (B. 37, 3656 C. 1904 [2] 1514).
- $C_{16}H_{17}Cl$  2)  $\alpha$ -Chlor- $\alpha\alpha$ -Diphenylbutan. Fl. (B. 37, 1451 C. 1904 [1] 1352).
- $C_{16}H_{17}J_3$  2) p-Jod-2-Methylphenyl-4-Aethylphenyljodoniumjodid. Sm. 90° (A. 327, 296 C. 1903 [2] 352).
- $C_{16}H_{18}O$  \*7)  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylbutan. Sm. 65°; Sd. 162—163°<sub>11</sub> (B. 37, 1451 C. 1904 [1] 1352).
- 9)  $\beta$ -Oxy- $\alpha\beta$ -Diphenylbutan. Sd. 179°<sub>14</sub> (B. 37, 1452 C. 1904 [1] 1352).
- $C_{16}H_{18}O_2$  \*3) Diäthyläther d. 4,4'-Dioxybiphenyl. Sm. 176° (A. 332, 68 C. 1904 [2] 42).
- 14) Dimethyläther d.  $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 59,4°; Sd. 352 bis 354°<sub>767</sub> (C. 1904 [1] 1650).
- 15) Dimethyläther d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 145,5° (Am. 31, 121 C. 1904 [1] 809).
- 16)  $\beta$ -Aethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\alpha$ -Diphenyläthan. Sd. 209—210°<sub>29</sub> (C. r. 138, 91 C. 1904 [1] 505; Bl. [3] 31, 304 C. 1904 [1] 1133).
- 17) Diphenyläther d.  $\alpha\delta$ -Dioxybutan. Sm. 98° (C. r. 138, 1048 C. 1904 [1] 1493).
- $C_{16}H_{18}O_3$  12) Methylester d. Artemisinsäure. Fl. (C. 1903 [2] 1377).
- $C_{16}H_{18}O_4$  \*4) 4,4'-Dimethyläther d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (Isohydranisoïn). Sm. 109° (B. 37, 1677 C. 1904 [1] 1522).
- 13)  $\alpha\beta$ -Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 220° u. Zers. (A. 335, 173, 186 C. 1904 [2] 1129).
- 14)  $\alpha\beta$ -Dimethyläther d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (A. 335, 174 C. 1904 [2] 1129).
- 15) Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Keto-1,4-Dihydrophenyl]äthan. Sm. 82° (A. 335, 172 C. 1904 [2] 1129).
- 16) Tetramethyläther d. 2,5,2',5'-Tetraoxybiphenyl. Sm. 104° (A. 332, 68 C. 1904 [2] 42).
- $C_{16}H_{18}O_7$  \*3) Nataloïn. Sm. 202° (Ar. 241, 352 C. 1903 [2] 726).
- 4) Aloïn (Feroxaloïn). Sm. 142° (Ar. 241, 341 C. 1903 [2] 725).
- $C_{16}H_{18}N_2$  \*6) p-Dimethylenditoluidin (oder C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>). Sm. 136° (C. 1903 [2] 238).
- 43) Methyldi[4-Methylphenyl]formamidin. Sm. 68—69° (Soc. 85, 996 C. 1904 [2] 831).
- 44) m-Dimethylenditoluidin (Anhydroformaldehyd-m-Toluidin). Sm. 148 bis 149° (B. 36, 42 C. 1903 [1] 504).
- 45) isom. m-Dimethylenditoluidin. Sm. 183—184° (B. 36, 42 C. 1903 [1] 504).
- 46) Base (aus 1,4-Anhydro-4-Methylamido-1-Oxymethylbenzol). Sm. 205 bis 210° u. Zers. 2HCl (M. 23, 988 C. 1903 [1] 289).
- $C_{16}H_{18}N_4$  \*1)  $\alpha\beta$ -Di[Phenylhydrazon]butan. Sm. 115—116° (B. 37, 2476 C. 1904 [2] 418).
- 18) 3,8-Di[Dimethylamido]diphenazon. Sm. 276°. HCl (B. 37, 31 C. 1904 [1] 524).
- $C_{16}H_{18}N_6$  C 65,3 — H 6,1 — N 28,6 — M. G. 294.
- 1) 3,6-Di[4-Amidobenzyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 212° (B. 35, 3939 C. 1903 [1] 39).
- $C_{16}H_{18}J_2$  3) Di[4-Aethylphenyl]jodoniumjodid. Sm. 42° (A. 327, 291 C. 1903 [2] 352).

- $C_{16}H_{18}J_2$  4) 2,4'-Dimethyl-2'-Aethyldiphenyljodoniumjodid. Sm. 168° (*J. pr.* [2] 69, 444 *C.* 1904 [2] 590).  
 5) 2-Methylphenyl-4-Propylphenyljodoniumjodid. Zers. bei 123° (*A.* 327, 314 *C.* 1903 [2] 354).
- $C_{16}H_{19}N$  \*6) Aethylbenzyl-4-Methylphenylamin. Sd. 226°<sub>28</sub>. Pikrat (*B.* 37, 2726 *C.* 1904 [2] 592).
- $C_{16}H_{19}N_2$  15) 4-Aethylamido-3-Methylbenzylidenphenylhydrazin. Sm. 95° (*B.* 37, 864 *C.* 1904 [1] 1207).  
 16) 4-Methyläthylamidobenzylidenphenylhydrazin. Sm. 114° (*B.* 37, 862 *C.* 1904 [1] 1206).
- $C_{16}H_{20}O$  4) Benzylidenthujaketon. Sm. 170° (*B.* 30, 425). — \*III, 140.  
 $C_{16}H_{20}O_3$  11) Rimusäure. Sm. 192—193°; Sd. 296—300°<sub>21</sub>. Ba + 14H<sub>2</sub>O (*C.* 1903 [2] 375; *Soc.* 85, 1242 *C.* 1904 [2] 1308).
- $C_{16}H_{20}O_5$  8) Dimethylester d.  $\gamma$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Butenäthyläther- $\delta\delta$ -Dicarbonsäure. Na (*A.* 336, 202 *C.* 1904 [2] 1731).
- $C_{16}H_{20}O_6$  10) Diacetat d. 3,6-Dioxy-2,5-Diisopropyl-1,4-Benzochinon. Sm. 137,5° (*B.* 37, 2389 *C.* 1904 [2] 308).
- $C_{16}H_{20}O_7$  9) Triäthylester d. 6-Oxybenzol-1,3-Dicarbonsäure-4-Methylcarbon-säure. Sm. 81° (*B.* 37, 2119 *C.* 1904 [2] 438).
- $C_{16}H_{20}N_2$  \*12) 4,4'-Di[Aethylamido]biphenyl. Sm. 115,5—116° (*B.* 35, 4182, 4190 *C.* 1903 [1] 142; *C.* 1903 [1] 1128; 1903 [2] 1271).  
 \*14) 4,4'-Di[Dimethylamido]biphenyl. Sm. 197° (198°). (2HBr, Br<sub>2</sub>) (*B.* 37, 29 *C.* 1904 [1] 523; *B.* 37, 2343 *C.* 1904 [2] 433; *B.* 37, 3765 *C.* 1904 [2] 1546).
- $C_{16}H_{20}N_4$  \*1) 3,3'-Di[Dimethylamido]azobenzol. + C<sub>6</sub>H<sub>6</sub> (*B.* 35, 4228 Anm. *C.* 1903 [1] 207).
- $C_{16}H_{21}N$  5) 4-Methyl-1-Isopropyl-1,2,3,4-Tetrahydrocarbazol. Sd. 202—204°<sub>14</sub>. Pikrat (*C.* 1904 [2] 342).  
 6) 4-Methyl-7-Isopropylcarbazolenin. Sd. 170—171°<sub>14</sub>. Pikrat (*C.* 1904 [2] 342).
- $C_{16}H_{22}O$  3)  $\beta$ -Oxy- $\beta$ -Phenyl- $\beta$ -Dimethyl- $\beta$ -Oktadien ( $\alpha$ -Phenylgeraniol). Sd. 175 bis 176°<sub>12</sub> (D.R.P. 153120 *C.* 1904 [2] 624).
- $C_{16}H_{22}O_2$  7) Benzoat d.  $\beta$ -Oxy- $\alpha$ - oder - $\beta$ -Nonen. Sd. 210—211°<sub>50</sub> (*Soc.* 83, 151 *C.* 1903 [1] 72, 436).
- $C_{16}H_{22}O_3$  12) Aether d. 6-Oxy-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 99,5° (*Soc.* 83, 119 *C.* 1903 [1] 230, 448).  
 13) Methylester d. r-Santonigen Säure. Sm. 110,5—111° (*G.* 25 [1] 523). — \*II, 978.
- $C_{16}H_{22}O_4$  \*2) Methylester d. Santonsäure. Sm. 85° (*B.* 37, 260 *C.* 1904 [1] 643).  
 \*5) Methylester d. Parasantonsäure. Sm. 183—184° (*C.* 1904 [1] 1446).
- $C_{16}H_{22}O_6$  10) Methylester d. Oxyparasantonsäure. Sm. 138—139° (*C.* 1903 [2] 1377).  
 11) Dimethylester d. 6-Ketododekahydrobiphenylen-3,4'-Dicarbon-säure. Sd. 255°<sub>20</sub> (*Soc.* 85, 429 *C.* 1904 [1] 1439).
- $C_{16}H_{22}O_7$  6) Triäthylester d. 6-Oxy-1,4-Dihydrobenzol-1,3-Dicarbonsäure-4-Methylcarbon-säure. Sm. 82° (*B.* 37, 2118 *C.* 1904 [2] 437).  
 7) Triäthylester d. Glutakonylglutakonsäure. Sm. 77—78° (*C. r.* 136, 693 *C.* 1903 [1] 960).
- $C_{16}H_{22}O_{10}$  3) Pentaacetat d. 1-Quercit. Sm. 124—125°. + C<sub>6</sub>H<sub>6</sub> (Sm. 87—97°) (*Soc.* 85, 626 *C.* 1904 [2] 329).
- $C_{16}H_{22}O_{11}$  \*2) Pentaacetat d. d-Glykose (*A.* 331, 373 *C.* 1904 [1] 1556).  
 \*3) isom. Pentaacetat d. d-Glykose (*A.* 331, 373 *C.* 1904 [1] 1556).
- $C_{16}H_{22}N_2$  \*5) Phenylhydrazon d. Campher. Sd. 210°<sub>17</sub> (*B.* 36, 868 *C.* 1903 [1] 972).
- $C_{16}H_{22}N_4$  9) 2,2'-Diamido-4,4'-Di[Dimethylamido]biphenyl. Sm. 166° (*B.* 37, 33 *C.* 1904 [1] 524).
- $C_{16}H_{24}O$  8) Hexyl-2,4,6-Trimethylphenylketon. Sd. 172°<sub>16</sub> (*B.* 37, 930 *C.* 1904 [1] 1209).
- $C_{16}H_{24}O_2$  8)  $\alpha$ -Beljiabietinolsäure. Sm. 96° (*Ar.* 240, 591 *C.* 1903 [1] 164).  
 9)  $\beta$ -Beljiabietinolsäure. Sm. 96° (*Ar.* 240, 591 *C.* 1903 [1] 164).  
 10)  $\alpha$ -Palabietinolsäure. Sm. 95° (*Ar.* 240, 581 *C.* 1903 [1] 163).  
 11)  $\beta$ -Palabietinolsäure. Sm. 95° (*Ar.* 240, 581 *C.* 1903 [1] 163).  
 12) Formiat d. Santalol. Sd. 175—178° (*C.* 1900 [2] 314). — \*III, 414.

- $C_{16}H_{24}O_4$  5) Methylester d. Santolsäure. Sm. 111—114° (B. 37, 260 C. 1904 [1] 643).
- 6) Aethylester d.  $\beta$ -[5-Keto-4-Methylhexahydrophenyl]propen-3-Acetessigsäure (Äe. d. Dihydrocarvonylacetessigsäure). Fl. (B. 37, 1668 C. 1904 [1] 1606).
- $C_{16}H_{24}O_8$  9) Camphenglykolmonoglykuronsäure. K +  $1\frac{1}{2}(2)H_2O$  (H. 37, 200 C. 1903 [1] 594).
- $C_{16}H_{24}O_{10}$  5)  $\beta\gamma\delta$ -Trimethylester- $\alpha$ -Diäthylester d. Butan- $\alpha\alpha\beta\gamma\delta$ -Pentacarbon-säure. Sm. 57—58° (B. 36, 3294 C. 1903 [2] 1167).
- $C_{16}H_{24}Br_2$  1)  $\alpha\beta$ -Dibrom- $\alpha$ -[2, 4, 6-Trimethylphenyl]heptan. Fl. (B. 37, 931 C. 1904 [1] 1209).
- $C_{16}H_{26}O$  5)  $\alpha$ -Oxy- $\alpha$ -[2, 4, 6-Trimethylphenyl]heptan. Sd. 194°<sub>21</sub> (B. 37, 931 C. 1904 [1] 1209).
- 6) Verbindung (aus Cadinen u. Formaldehyd). Sd. 180°<sub>15</sub> (C. r. 138, 1229 C. 1904 [2] 106).
- 7) Verbindung (aus Caryophyllen u. Formaldehyd). Sd. 177—178°<sub>15</sub> (C. r. 138, 1228 C. 1904 [2] 106).
- 8) Verbindung (aus Cloven u. Formaldehyd). Sd. 170°<sub>12</sub> (C. r. 138, 1229 C. 1904 [2] 106).
- $C_{16}H_{26}O_2$  14) l-Menthylester d.  $\alpha\gamma$ -Pentadien- $\alpha$ -Carbonsäure. Sd. 173°<sub>14</sub> (A. 327, 178 C. 1903 [1] 1396).
- $C_{16}H_{26}O_3$  \*12) Isoamylester d. Camphocarbonsäure (B. 36, 1310 C. 1903 [1] 1225; B. 37, 2515 C. 1904 [2] 332; B. 37, 3947 C. 1904 [2] 1569).
- $C_{16}H_{26}O_4$  4) Gurjoresinolsäure. Sm. 254—255°. Na (Ar. 241, 396 C. 1903 [2] 724).
- 5) Diacetat d. Glykol  $C_{12}H_{22}O_2$ . Sd. 166—170°<sub>13</sub> (M. 24, 159 C. 1903 [1] 957).
- $C_{16}H_{26}O_6$  5) Triacetat d. 1,2-Dioxy-4-[ $\alpha$ -Oxyisopropyl]-1-Methylhexahydro-benzol. Sd. 193—195°<sub>20</sub> (C. 1897 [2] 417). — \*III, 712.
- $C_{16}H_{26}O_7$  3) Monomenthylester d. Citronensäure (C. 1903 [1] 162; B. 37, 1380 C. 1904 [1] 1441).
- $C_{16}H_{26}O_8$  \*16) Tetraäthylester d.  $\beta$ -Methylpropan- $\alpha\alpha\gamma\gamma$ -Tetracarbon-säure. Sd. 194—197°<sub>14</sub> (J. pr. [2] 68, 157 C. 1903 [2] 759).
- $C_{16}H_{28}O$  C 81,4 — H 11,8 — O 6,8 — M. G. 236.
- 1) Verbindung (aus Asclepias syriaca L.). Sm. 104—105° (J. pr. [2] 68, 407 C. 1904 [1] 105).
- $C_{16}H_{28}O_2$  4) Santanolformaldehyd. Fl. (D.R.P. 148944 C. 1904 [1] 846).
- 5) Acetat d. 4-[ $\beta$ -Oxy- $\beta$ -Aethylbutyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten. Fl. (Bl. [3] 31, 464 C. 1904 [1] 1516).
- 6) l-Menthylester d.  $\alpha$ -Penten- $\alpha$ -Carbonsäure. Sd. 163—164°<sub>14</sub> (A. 327, 174 C. 1903 [1] 1396).
- 7) l-Menthylester d.  $\alpha$ -Penten- $\epsilon$ -Carbonsäure. Sd. 155—155,5°<sub>14</sub> (A. 327, 176 C. 1903 [1] 1396).
- 8) l-Menthylester d.  $\beta$ -Penten- $\alpha$ -Carbonsäure. Sd. 149—150°<sub>14</sub> (A. 327, 175 C. 1903 [1] 1396).
- 9) l-Menthylester d.  $\beta$ -Penten- $\epsilon$ -Carbonsäure. Sd. 156—157°<sub>14</sub> (A. 327, 176 C. 1903 [1] 1396).
- 10) l-Menthylester d. R-Pentamethylencarbon-säure. Sd. 160,5—161°<sub>14</sub> (A. 327, 183 C. 1903 [1] 1396).
- $C_{16}H_{30}O_2$  10) Valerianat d.  $\beta$ -Oxy- $\alpha$ -oder- $\beta$ -Undeken. Sd. 185—190°<sub>50</sub> (Soc. 83, 154 C. 1903 [1] 72, 436).
- 11) Capronat d. l-Menthol. Sd. 153°<sub>15</sub> (B. 31, 364). — \*III, 333.
- $C_{16}H_{30}O_3$  9) Scammonolsäure (C. 1904 [2] 1226).
- $C_{16}H_{30}O_4$  8) Aethylester d.  $\alpha$ -Acetoxylundekan- $\alpha$ -Carbonsäure. Sd. 172—173°<sub>18</sub> (Bl. [3] 29, 1127 C. 1904 [1] 261).
- $C_{16}H_{30}O_6$  \*1) Agaricinsäure (D.R.P. 138713 C. 1903 [1] 546).
- $C_{16}H_{32}O_2$  \*1) Palmitinsäure (M. 23, 941 C. 1903 [1] 297; B. 36, 1050 C. 1903 [1] 1148).
- \*6) Aethylester d. Myristinsäure. Sd. 102° (B. 36, 4340 C. 1904 [1] 433).
- 16) Gallipharsäure. Sm. 54°. Ag (Ar. 242, 232 C. 1904 [1] 1654).
- $C_{16}H_{34}O$  \*1)  $\alpha$ -Oxyhexadekan. Sm. 49,3°; Sd. 182—184°<sub>9,5</sub> (M. 25, 346 C. 1904 [1] 1399).
- $C_{16}H_{34}O_2$  2)  $\beta$ -Dioxyhexadekan. Sd. 200°<sub>12</sub> (C. r. 136, 1677 C. 1903 [2] 419).

- $C_{18}H_8O_2N_2$  \*2) 5,6-Diketo-5,6-Dihydro- $\alpha\beta$ -Naphtophenazin. Sm. 265° u. Zers. (B. 36, 3624 C. 1903 [2] 1383).  
C 60,0 — H 2,5 — O 20,0 — N 17,5 — M. G. 320.
- $C_{18}H_8O_4N_4$  1) Nitril d.  $\alpha\beta$ -Di[2-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Zers. oberh. 210° (A. 332, 283 C. 1904 [2] 702).  
2) Nitril d.  $\alpha\beta$ -Di[4-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. 268 bis 269° (A. 332, 279 C. 1904 [2] 701).
- $C_{18}H_8O_6N_4$  4) isom. Dinitroindigo (M. 23, 1006 C. 1903 [1] 292).
- $C_{18}H_8O_8Br_4$  1) Dimethyläther d. 2,4,6,8-Tetrabrom-1,3,5,7-Tetraoxy-9,10-Anthrachinon (D.R.P. 155633 C. 1904 [2] 1487).
- $C_{18}H_8O_7N_2$  2) Anhydrid d.  $\alpha\beta$ -Di[4-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. 197° (A. 332, 281 C. 1904 [2] 702).
- $C_{18}H_8O_8N_2$  C 53,9 — H 2,2 — O 35,9 — N 7,9 — M. G. 356.  
1) Acetat d. p-Dinitro-3-Oxy-9,10-Phenanthrenchinon. Sm. 263—265° (A. 322, 158). — \*III, 318.
- $C_{18}H_8O_9N_2$  C 51,6 — H 2,1 — O 38,7 — N 7,5 — M. G. 372.  
1) Anhydroderivat d. 3-Nitrobenzol-1-Carbonsäure-2-Carbonsäure-aldehyd. Sm. 248—251° (M. 24, 822 C. 1904 [1] 372).  
2) Anhydroderivat d. 4-Nitrobenzol-1-Carbonsäurealdehyd-2-Carbonsäure. Sm. 224—226° (M. 24, 817 C. 1904 [1] 372).
- $C_{18}H_8N_2Cl_2$  2) 6,11-Dichlor- $\beta\beta$ -Naphtophenazin. Sm. 265° (A. 334, 360 C. 1904 [2] 1055).
- $C_{18}H_8O_2N$  9) Naphtophenoxazon. Sm. 200—211° (B. 36, 1808 C. 1903 [2] 205).  
 $C_{18}H_8O_3N$  2) Oxyphenonaphtoxazon (B. 36, 1810 C. 1903 [2] 206).  
 $C_{18}H_8O_6N$  \*1) Gallorubin. Sm. bei 300°. +  $C_6H_6O$  (B. 37, 828 C. 1904 [1] 1152).  
 $C_{18}H_{10}O_2N_2$  \*1) Indigo. HCl, (2HCl, PtCl<sub>4</sub>), HBr,  $H_2SO_4$ , 2  $H_2SO_4$  (C. 1903 [1] 640, 1138; D.R.P. 138177 C. 1903 [1] 211; A. 325, 196 C. 1903 [1] 467; D.R.P. 138903 C. 1903 [1] 549; D.R.P. 139567 C. 1903 [1] 745; M. 24, 13 C. 1903 [1] 776; Bl. [3] 29, 756 C. 1903 [2] 628).  
\*3) Indirubin (B. 35, 4339 C. 1903 [1] 294; Bl. [3] 29, 756 C. 1903 [2] 628).  
\*12) 5,6-Dioxy- $\alpha\beta$ -Naphtophenazin. Sm. 270° u. Zers. (B. 36, 3625 C. 1903 [2] 1383).
- $C_{18}H_{10}O_2N_4$  21) Oxim d. Naphtophenoxazon. HCl (B. 36, 1812 C. 1903 [2] 207).  
 $C_{18}H_{10}O_8N_2$  9) s-Di[3-Cyanphenylamid] d. Oxalsäure (C. 1904 [2] 102).  
6) Indenophenazinglykolsäure. Sm. 223—224° (B. 36, 3626 C. 1903 [2] 1383).
- $C_{18}H_{10}O_4N_4$  6) Verbindung (aus Dioxychinopyrin). 2HCl (B. 37, 2136 C. 1904 [2] 233).  
 $C_{18}H_{10}O_4N_6$  C 54,9 — H 2,8 — O 18,3 — N 24,0 — M. G. 350.  
1) pp'-Tetrazoindigo (M. 24, 14 C. 1903 [1] 776).
- $C_{18}H_{10}O_5N_2$  6) 2-[2-Nitro-4-Oxyphenyl]amido-1,4-Naphtochinon (B. 30, 2137). — \*III, 275.
- $C_{18}H_{10}O_8N_2$  4)  $\alpha\beta$ -Di[2-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. 237,5° u. Zers. (A. 332, 284 C. 1904 [2] 702).
- $C_{18}H_{10}O_{10}N_2$  C 49,2 — H 2,6 — O 41,0 — N 7,2 — M. G. 390.  
1) Dimethyläther d. p-Dinitro-1,3,5,7-Tetraoxy-9,10-Anthrachinon. Sm. oberh. 300° (D.R.P. 155633 C. 1904 [2] 1487).
- $C_{18}H_{11}ON_3$  7) 2-[4-Oxy-1-Naphtyl]-2,1,3-Benztriazol. Sm. 203—204° (J. pr. [2] 67, 584 C. 1903 [2] 205).
- $C_{18}H_{11}O_2N$  23) 6-Benzylidenamido-1,2-Benzpyron. Sm. 150—152° (Soc. 85, 1234 C. 1904 [2] 1124).
- $C_{18}H_{11}O_3N$  32) 3,4-Methylenäther d. 3-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroindol. Sm. 221° (C. 1903 [1] 34).
- $C_{18}H_{11}O_3N_3$  16) 4-Phenylazo-5-Phenylisoxazol-3-Carbonsäure. Sm. 217° (B. 37, 2206 C. 1904 [2] 323).
- $C_{18}H_{11}O_4N$  12)  $\alpha$ -Phthalylamidophenyllessigsäure. Sm. 168° (B. 37, 1688 C. 1904 [1] 1524).  
13) Verbindung (aus Chinolin u. Pyrogallolcarbonat). Sm. 103° (B. 37, 110 C. 1904 [1] 584).
- $C_{18}H_{11}O_4N_3$  6) 8-Nitro-4-[4-Nitrobenzyl]isochinolin. Sm. 149—150° (A. 326, 283 C. 1903 [1] 928; A. 326, 285 C. 1903 [1] 929).
- $C_{18}H_{11}O_5N$  4) Laktone d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]propan- $\gamma$ -Carbonsäure. Sm. 171° (A. 333, 235 C. 1904 [2] 1390).

- $C_{16}H_{11}O_5N$  \*4) Berberidinsäure (*Soc.* 83, 620 *C.* 1903 [1] 1364).  
 5) 2-Aethyläther d. 4-Nitro-1,2-Dioxy-9,10-Anthrachinon (D.R.P. 150322 *C.* 1904 [1] 1043).
- $C_{16}H_{11}N_4Cl_3$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Cyanphenylamido]äthan. *Sm.* 165—167° (*C.* 1904 [2] 103).
- $C_{16}H_{11}N_4Br_3$  2)  $\beta\beta\beta$ -Tribrom- $\alpha\alpha$ -Di[3-Cyanphenylamido]äthan. *Zers.* bei 130° (*C.* 1904 [2] 103).
- $C_{16}H_{11}BrJ_2$  1) 3-Bromphenyl-1-Naphtyljodoniumjodid. *Sm.* 133° u. *Zers.* (*J. pr.* [2] 69, 332 *C.* 1904 [2] 36).
- $C_{16}H_{11}Br_2J$  1) 3-Bromphenyl-1-Naphtyljodoniumbromid. *Sm.* 156° (*J. pr.* [2] 69, 332 *C.* 1904 [2] 36).
- $C_{16}H_{12}ON_2$  \*16) 2-Benzoyl-5-Phenylimidazol (Isoindileucin). *Sm.* 194—195° (*B.* 22, 2559; *B.* 35, 4135 *C.* 1903 [1] 295).
- $C_{16}H_{12}ON_4$  3) Verbindung (aus Diacetonitril u. Isatin). *Sm.* oberh. 285° (*J. pr.* [2] 67, 511 *C.* 1903 [2] 252).
- $C_{16}H_{12}O_2N_2$  \*10) Indigweiss (D.R.P. 137884 *C.* 1903 [1] 104).  
 35) 6-Benzylidenhydrazido-1,2-Benzpyron. *Sm.* 190—194° (*Soc.* 85, 1236 *C.* 1904 [2] 1124).  
 36) 4-[4-Nitrobenzyl]isochinolin. *Sm.* 128,5—129°.  $HNO_3$  (*A.* 326, 273 *C.* 1903 [1] 928).
- $C_{16}H_{12}O_2N_4$  12) pp'-Diamidoindigo (*M.* 24, 11 *C.* 1903 [1] 775; *M.* 24, 14 *C.* 1903 [1] 776).  
 13) 4-Phenylazo-5-Phenylpyrazol-3-Carbonsäure. *Sm.* 247—248° u. *Zers.* (*B.* 37, 2207 *C.* 1904 [2] 323).
- $C_{16}H_{12}O_2Cl_2$  3) Chlorid d.  $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. *Sm.* 119° (*B.* 37, 3217 *C.* 1904 [2] 1120).
- $C_{16}H_{12}O_2Br_4$  1) Dimethyläther d.  $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthen. *Sm.* 279 bis 280° (*B.* 36, 1889 *C.* 1903 [2] 291).
- $C_{16}H_{12}O_2Br_3$  1) Dimethyläther d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]-äthan. *Sm.* 228—230° u. *Zers.* (*B.* 36, 1888 *C.* 1903 [2] 291).
- $C_{16}H_{12}O_3N_2$  19) Methylester d. 1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-4-Carbonsäure. *Sm.* 114° (*B.* 21, 1611; *M.* 25, 395 *C.* 1904 [2] 324). — IV, 718.  
 20) Phenylimid d. 3-Acetylamidobenzol-1,2-Dicarbonsäure. *Sm.* 191° (*B.* 37, 2611 *C.* 1904 [2] 522).
- $C_{16}H_{12}O_4N_2$  \*1) Isatyd. *Sm.* 245° u. *Zers.* (217°?) (*B.* 12, 1309; 34, 1541; *B.* 37, 943 *C.* 1904 [1] 1217).  
 \*9) Diacetat d. 2,3-Dioxy-5,10-Naphtdiazin. *Sm.* 226° (*B.* 35, 4305 *C.* 1903 [1] 344).  
 18) 8-Nitro-1-Aethylamido-9,10-Anthrachinon (D.R.P. 144634 *C.* 1903 [2] 750).  
 19) Phenylazobenzoylbrenztraubensäure. *Zers.* bei 140—150° (*B.* 37, 2208 *C.* 1904 [2] 323).
- $C_{16}H_{12}O_4N_4$  8) 5-Methyl-1-Phenyl-3-[3,5-Dinitrophenyl]pyrazol. *Sm.* 179° (*J. pr.* [2] 69, 467 *C.* 1904 [2] 596).
- $C_{16}H_{12}O_6N_4$  5) 4,8-Dinitro-1,5-Di[Methylamido]-9,10-Anthrachinon (D.R.P. 144634 *C.* 1903 [2] 750).
- $C_{16}H_{12}O_8N_2$  8) Di[2-Nitrophenylester] d. Bernsteinsäure. *Sm.* 162° (*B.* 35, 4082 *C.* 1903 [1] 74).  
 9) Di[3-Nitrophenylester] d. Bernsteinsäure. *Sm.* 153° (*B.* 35, 4082 *C.* 1903 [1] 74).  
 10) Di[4-Nitrophenylester] d. Bernsteinsäure. *Sm.* 178° (*B.* 35, 4082 *C.* 1903 [1] 74).
- $C_{16}H_{13}ON$  \*2) 9-Acetylamidoanthracen. *Sm.* 273—274° (*A.* 330, 166 *C.* 1904 [1] 891).  
 \*27) Nitril d.  $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure. *Sm.* 126—127° (*Soc.* 85, 1358 *C.* 1904 [2] 1646).  
 38) 2-[4-Oxyphenyl]amidonaphtalin. *Sm.* 135° (*C.* 1904 [1] 1013).  
 39) 3-[2-Oxybenzyliden]-2-Methylindol.  $HCl$  (*B.* 37, 323 *C.* 1904 [1] 668).  
 40) 7-Oxy-2-Methyl-4-Phenylchinolin. *Sm.* 262°.  $HCl + 1\frac{1}{2}H_2O$ , ( $2HCl$ ,  $PtCl_4$ ),  $H_2SO_4$ ,  $H_2Cr_2O_7$ , Pikrat, Oxalat +  $H_2O$  (*B.* 36, 2453 *C.* 1903 [2] 670).

- $C_{18}H_{15}ON$  41) 4-[4-Oxybenzyl]isochinolin. Sm. 238° (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (A. 326, 289 C. 1903 [1] 929).
- $C_{18}H_{15}ON_3$  \*2) 4-Amido-1-[4-Oxyphenylazo]naphtalin. Zers. bei 200° (B. 36, 4149 C. 1904 [1] 186).
- $C_{18}H_{15}O_2N$  \*2) 10-Nitro-9-Aethylanthracen. Sm. 135° (A. 330, 173 C. 1904 [1] 891).
- \*30)  $\beta$ -Cyan- $\alpha\beta$ -Diphenylpropionsäure? Sm. 196–198° (B. 37, 4067 C. 1904 [2] 1651).
- 35) 1-Methylamido-2-Methyl-9,10-Anthrachinon. Sm. 114° (D.R.P. 144634 C. 1903 [2] 750).
- 36) 4-Amido-1-Benzoyl-2-Methylbenzfuran. Sm. 138° (B. 36, 1261 C. 1903 [1] 1184).
- 37) Methyläther d. 5-Phenyl-3-[4-Oxyphenyl]isoxazol. Sm. 121° (Soc. 85, 1326 C. 1904 [2] 1645).
- 38) Methyläther d. 4-Oxy-1-Keto-3-Phenyl-1,2-Dihydroisochinolin. Sm. 235–240° (B. 20, 2868; B. 37, 1690 C. 1904 [1] 1524).
- 39) 2-Cinnamylidenamidobenzol-1-Carbonsäure. Sm. 163–164° (B. 37, 595 C. 1904 [1] 881).
- 40) Phenylimid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 137–138° (Soc. 85, 1367 C. 1904 [2] 1646).
- $C_{18}H_{15}O_2N_3$  \*19) Nitril d. 2,6-Diketo-4-[4-Isopropylphenyl]-1,2,3,6-Tetrahydropyridin-3,5-Dicarbonsäure. NH<sub>4</sub>, Cu + 8H<sub>2</sub>O, Ag, Coniinsalz (A. 325, 213 C. 1903 [1] 439).
- 22) 4-[3-Nitro-4-Amidobenzyl]isochinolin. Sm. 231–232° (A. 326, 281 C. 1903 [1] 928).
- 23) Methylester d. 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 135–136° (B. 35, 4048 C. 1903 [1] 169).
- 24) Benzolat d. 5-Oxy-4-Methyl-1-Phenyl-1,2,3-Triazol. Sm. 91° (A. 335, 94 C. 1904 [2] 1232).
- $C_{18}H_{15}O_2N_5$  3) 4-Semicarbazon-5-Keto-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 205,5° (B. 36, 1135 C. 1903 [1] 1254).
- $C_{18}H_{15}O_2Cl$  \*1)  $\beta$ -Chlor- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\alpha$ -Chlordiphenacyl). Sm. 117° (B. 36, 2395 C. 1903 [2] 498).
- \*2) isom.  $\beta$ -Chlor- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\beta$ -Chlordiphenacyl). Sm. 155° (B. 36, 2395 C. 1903 [2] 498).
- 6)  $\delta$ -Chlordiphenacyl. Sm. 189° (B. 36, 2403 C. 1903 [2] 499).
- $C_{18}H_{15}O_2Br$  \*2) isom.  $\beta$ -Brom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\beta$ -Bromdiphenacyl). Sm. 161° (B. 36, 2395 C. 1903 [2] 498).
- \*3)  $\beta$ -Brom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\alpha$ -Bromdiphenacyl). Sm. 129° (B. 36, 2395 C. 1903 [2] 498).
- $C_{18}H_{15}O_2J$  5)  $\beta$ -Jod- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\alpha$ -Joddiphenacyl). Sm. 90° u. Zers. (B. 36, 2407 C. 1903 [2] 500).
- 6) isom.  $\beta$ -Jod- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\beta$ -Joddiphenacyl). Sm. 105° (B. 32, 533; B. 36, 2409 C. 1903 [2] 500). — \*III, 229.
- 7) isom.  $\beta$ -Jod- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\delta$ -Joddiphenacyl). Sm. 150–153° (B. 36, 2411 C. 1903 [2] 500).
- 8)  $\beta$ -Jod- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan ( $\gamma$ -Joddiphenacyl). Sm. 121° (B. 36, 2407 C. 1903 [2] 499).
- $C_{18}H_{15}O_3N$  \*2) 10-Nitro-9-Keto-10-Aethyl-9,10-Dihydroanthracen. Sm. 102° (A. 330, 176 C. 1904 [1] 891).
- 27) 3,4-Methylenäther d. Methyl-4-[3,4-Dioxybenzyliden]amido-phenylketon. Sm. 147° (B. 37, 393 C. 1904 [1] 657).
- 28) 3,4-Methylenäther d.  $\gamma$ -Keto- $\gamma$ -[4-Amidophenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 198–200° (B. 37, 393 C. 1904 [1] 657).
- 29) 4-Aethylamido-1-Oxy-9,10-Anthrachinon (D.R.P. 154353 C. 1904 [2] 1013).
- 30) 6,7-Dioxy-1-Keto-2-Benzyl-1,2-Dihydroisochinolin. Sm. 225° (B. 37, 531 C. 1904 [1] 819).
- 31) Phenylamidoformiat d. 4-Oxymethylbenzfuran. Sm. 90° (B. 37, 201 C. 1904 [1] 661).
- 32) 4-Aethoxyphenylimid d. Benzol-1,2-Dicarbonsäure (2 isom. Formen). Sm. 206,5° (B. 36, 1002 C. 1903 [1] 1132).
- $C_{18}H_{15}O_3N_3$  10)  $\delta$ -Phenylazo- $\gamma$ -Keto- $\alpha$ -[4-Nitrophenyl]- $\alpha$ -Buten. Sm. 210° u. Zers. (B. 36, 1450 C. 1903 [1] 1345).

- $C_{16}H_{13}O_3N_3$  11) 6-Keto-2-Phenyl-4-[3-Nitrophenyl]-3,4,5,6-Tetrahydro-1,3-Diazin. Sm. 192—193° (*Soc.* 83, 719 *C.* 1903 [2] 54).  
 12) Acetat d. 3-Acetylamido-2-Oxy-5,10-Naphtdiazin. Sm. 230° (*B.* 35, 4305 *C.* 1903 [1] 344).
- $C_{16}H_{13}O_3N_5$  \*2) 5-Keto-4-[4-Nitrophenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydro-pyrazol. Sm. 198° (*C. r.* 139, 135 *C.* 1904 [2] 588).
- $C_{16}H_{13}O_3Cl$  1) Methylester d.  $\alpha$ -Benzoyl- $\alpha$ -[4-Chlorphenyl]essigsäure. Sm. 176° (*J. pr.* [2] 67, 387 *C.* 1903 [1] 1357).
- $C_{16}H_{13}O_3Br$  2)  $\alpha\gamma$ -Lakton d.  $\beta$ -Brom- $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Sm. 105° u. Zers. (*A.* 333, 233 *C.* 1904 [2] 1390).
- $C_{16}H_{13}O_4N$  23) 4-Methyläther d.  $\beta$ -Oximido- $\alpha\gamma$ -Diketo- $\alpha$ -Phenyl- $\gamma$ -[4-Oxyphenyl]-propan. Sm. 127° (*B.* 37, 1535 *C.* 1904 [1] 1609).  
 24) 6-Methyläther d. 3-Oximido-6-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 160° u. Zers. (*B.* 37, 775 *C.* 1904 [1] 1155).  
 25) 7-Methyläther d. 3-Oximido-7-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 188° u. Zers. (*B.* 37, 1181 *C.* 1904 [1] 1275).  
 26) Acetat d. 10-Nitro-9-Oxy-9,10-Dihydroanthracen. Sm. 120° u. Zers. (*A.* 330, 158 *C.* 1904 [1] 890).
- $C_{16}H_{13}O_5N$  10)  $\alpha$ -Benzoylamidophenyllessigsäure- $\alpha^2$ -Carbonsäure. Sm. 162—163° (*B.* 37, 1690 *C.* 1904 [1] 1524).
- $C_{16}H_{13}O_6N_3$  \*1) 9,9,10-Trinitro-10-Aethyl-9,10-Dihydroanthracen. Sm. 136° u. Zers. (*A.* 330, 175 *C.* 1904 [1] 891).  
 3) Diacetat d. 6-Nitro-3,3'-Dioxyazobenzol. Sm. 141° (*J. pr.* [2] 67, 268 *C.* 1903 [1] 1221).
- $C_{16}H_{13}N_2Cl$  2) Nitril d.  $\beta$ -Imido- $\gamma$ -Phenyl- $\alpha$ -[4-Chlorphenyl]buttersäure. Sm. 67 bis 70° (*J. pr.* [2] 67, 392 *C.* 1903 [1] 1357).
- $C_{16}H_{13}N_4Cl$  1) 5-Chlor-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 109° (*B.* 36, 3597 *C.* 1903 [2] 1378).
- $C_{16}H_{14}ON_2$  \*19) 3-[4-Methylphenyl]imido-2-Keto-5-Methyl-2,3-Dihydroindol. Sm. 259° (*A.* 332, 261 *C.* 1904 [2] 699).  
 \*37) 2,5-Di[2-Methylphenyl]-1,3,4-Oxdiazol. Sm. 121°. + 2AgNO<sub>3</sub> (*J. pr.* [2] 69, 374 *C.* 1904 [2] 535).  
 \*38) 2,5-Di[3-Methylphenyl]-1,3,4-Oxdiazol. Sm. 72°. + AgNO<sub>3</sub> (*J. pr.* [2] 69, 376 *C.* 1904 [2] 535).  
 \*39) 2,5-Dibenzyl-1,3,4-Oxdiazol. Sm. 98° (*J. pr.* [2] 69, 378 *C.* 1904 [2] 535).  
 50) 2,5-Di[4-Methylphenyl]-1,3,4-Oxdiazol. Sm. 175°. + AgNO<sub>3</sub> (*J. pr.* [2] 69, 377 *C.* 1904 [2] 535).  
 51) Methyläther d. 3-Phenyl-5-[4-Oxyphenyl]pyrazol. Sm. 170° (*C. r.* 136, 1264 *C.* 1903 [2] 122).  
 52) 6-Keto-2,4-Diphenyl-3,4,5,6-Tetrahydro-1,3-Diazin. Sm. 180° (2HCl, PtCl<sub>4</sub>) (*Soc.* 83, 377 *C.* 1903 [1] 845, 1144; *Soc.* 83, 722 *C.* 1903 [2] 54).
- $C_{16}H_{14}ON_4$  \*1) 5-Keto-4-Phenylhydrazon-3-Methyl-1-Phenyl-4,5-Dihydro-pyrazol. Sm. 156° (*B.* 36, 2687 *C.* 1903 [2] 1009; *J. pr.* [2] 70, 379 *C.* 1904 [2] 1719).  
 8) 5-Acetylamido-1,4-Diphenyl-1,2,3-Triazol. Sm. 172° (*B.* 35, 4058 *C.* 1903 [1] 171).  
 9) 3-Acetylamido-1,5-Diphenyl-1,2,4-Triazol. HCl (*Am.* 29, 78 *C.* 1903 [1] 523).
- $C_{16}H_{14}OBr_2$  6) Methyläther d.  $\beta,\beta$ -Dibrom- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 98—99° (*B.* 37, 229 *C.* 1904 [1] 659).
- $C_{16}H_{14}O_2N_2$  \*1)  $\alpha\beta$ -Di[Benzoylamido]äthen. Sm. 202—203° (*B.* 37, 3115 *C.* 1904 [2] 1316).  
 43) 1,5-Di[Methylamido]-9,10-Anthrachinon (D.R.P. 144634 *C.* 1903 [2] 750; *B.* 37, 70 *C.* 1904 [1] 666; D.R.P. 156056 *C.* 1904 [2] 1631).  
 44) 1,8-Di[Methylamido]-9,10-Anthrachinon (D.R.P. 144634 *C.* 1903 [2] 750; D.R.P. 156056 *C.* 1904 [2] 1631).  
 45) 3,3'-Diacetylazobenzol. Sm. 105° (*C.* 1903 [2] 112).  
 46) 4-Oxy-3-Keto-1-Methyl-2,5-Diphenyl-2,3-Dihdropyrazol. Sm. 221° (*B.* 36, 1137 *C.* 1903 [1] 1254).  
 47)  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure. Sm. 158° (*B.* 36, 2528 *C.* 1903 [2] 496).

- $C_{16}H_{14}O_2N_2$  48) Methylester d. Azobenzol-4-Akrylsäure. Sm.  $145^\circ$  (*C. r.* 135, 1117 *C.* 1903 [1] 286).  
 49) 3,3'-Dimethyl-4,4'-Biphenylenamid d. Oxalsäure. Sm.  $335^\circ$  (*M.* 25, 385 *C.* 1904 [2] 320).
- $C_{16}H_{14}O_2Cl_2$  3)  $\gamma\gamma$ -Dichlor- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm.  $164^\circ$  (*B.* 36, 2400 *C.* 1903 [2] 498).
- $C_{16}H_{14}O_2Br_2$  6)  $\gamma\gamma$ -Dibrom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm.  $145^\circ$  u. Zers. (*B.* 36, 2402 *C.* 1903 [2] 499).  
 7) Acetat d.  $\alpha\beta$ -Dibrom-2-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm.  $83^\circ$  (*B.* 36, 4003 *C.* 1904 [1] 174).
- $C_{16}H_{14}O_2S_2$  2) Disulfid d. 1-Methylbenzol-2-Thiolcarbonsäure. Sm.  $62-75^\circ$  (*B.* 36, 1012 *C.* 1903 [1] 1078).  
 3) Disulfid d. 1-Methylbenzol-4-Thiolcarbonsäure. Sm.  $116^\circ$  (*B.* 36, 1012 *C.* 1903 [1] 1078).
- $C_{16}H_{14}O_6N_2$  26)  $\alpha$ -Acetyl- $\alpha\beta$ -Dibenzoylhydrazin. Sm.  $169-170^\circ$  (*J. pr.* [2] 70, 275 *C.* 1904 [2] 1544).  
 27) 3,3'-Diacetylazoxybenzol. Sm.  $137,5^\circ$  ( $130-131^\circ$ ) (*C.* 1903 [2] 112; *B.* 36, 1618 *C.* 1903 [2] 36).  
 28) 2,5-Diketo-1-Phenyl-4-[4-Oxybenzyl]tetrahydroimidazol. Sm.  $184^\circ$  (*B.* 36, 3345 *C.* 1903 [2] 1176).  
 29) 3-Aethylester d. Azobenzol-3-Carbonsäure-3'-Carbonsäurealdehyd. Sm.  $156^\circ$  (*B.* 36, 3474 *C.* 1903 [2] 1269).  
 30) 4-Aethylester d. Azobenzol-4-Carbonsäure-4'-Carbonsäurealdehyd. Sm.  $60^\circ$  (*B.* 36, 3475 *C.* 1903 [2] 1270).  
 31) Benzoylamid d. Benzoylamidoessigsäure. Sm.  $179^\circ$  (*Soc.* 81, 1532 *C.* 1903 [1] 157).
- $C_{16}H_{14}O_6N_4$  12)  $\gamma$ -Phenylhydrazon- $\delta$ -Oximido- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten. Sm. 99 bis  $100^\circ$  (*C.* 1904 [1] 28; *A.* 330, 253 *C.* 1904 [1] 946).
- $C_{16}H_{14}O_6Br_2$  1)  $\beta\gamma$ -Dibrom- $\alpha$ -Oxy- $\beta\gamma$ -Diphenylbuttersäure. Zers. bei  $144^\circ$  (*A.* 333, 233 *C.* 1904 [2] 1390).  
 2) 4-Acetat d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan- $\alpha$ -Methyläther. Sm.  $97^\circ$  (*A.* 334, 382 *C.* 1904 [2] 1052).
- $C_{16}H_{14}O_4N_2$  15)  $\alpha\beta$ -Dibenzoylhydrazidoessigsäure. Sm.  $195^\circ$  u. Zers. Ag (*J. pr.* [2] 70, 277 *C.* 1904 [2] 1544).  
 16)  $\alpha\beta$ -Di[2-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (*A.* 332, 270 *C.* 1904 [2] 700).  
 17) isom.  $\alpha\beta$ -Di[2-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (*A.* 332, 270 *C.* 1904 [2] 700).  
 18)  $\alpha\beta$ -Di[4-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (*A.* 332, 282 *C.* 1904 [2] 702).  
 19) polym. 3-Methylenamidobenzol-1-Carbonsäure. Sm.  $175-200^\circ$  (*B.* 36, 51 *C.* 1903 [1] 505).  
 20) Dimethylester d. Azobenzol-2,2'-Dicarbonsäure. Sm.  $101^\circ$  (*A.* 326, 346 *C.* 1903 [1] 1130).  
 21) Dimethylester d. Azobenzol-3,3'-Dicarbonsäure. Sm.  $163^\circ$  (corr.) (*A.* 326, 343 *C.* 1903 [1] 1130).  
 22) Dimethylester d. Azobenzol-4,4'-Dicarbonsäure. Sm.  $242^\circ$  (corr.) (*A.* 326, 338 *C.* 1903 [1] 1130).  
 23) Diacetat d. 3,3'-Dioxyazobenzol. Sm.  $137^\circ$  (*J. pr.* [2] 67, 267 *C.* 1903 [1] 1221).  
 24) Acetylderivat d. Verb.  $C_{14}H_{12}O_6N_2$  (*J. pr.* [2] 70, 330 *C.* 1904 [2] 1541).
- $C_{16}H_{14}O_4N_4$  9)  $\gamma$ -Phenylhydrazon- $\alpha$ -[2,4-Dinitrophenyl]- $\alpha$ -Buten. Sm.  $191^\circ$  (*M.* 23, 1006 *C.* 1903 [1] 292).
- $C_{16}H_{14}O_4Cl_4$  1)  $\alpha\beta$ -Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]-äthan. Sm.  $242^\circ$  (*A.* 325, 56 *C.* 1903 [1] 462).  
 2)  $\alpha\beta$ -Dimethyläther d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm.  $168^\circ$  (*A.* 325, 57 *C.* 1903 [1] 462).
- $C_{16}H_{14}O_4Br_2$  3) Verbindung (aus ?-Brom-8-Oxy-5,7-Dimethylfluoron). Sm.  $117-118^\circ$  (*M.* 25, 329 *C.* 1904 [1] 1495).
- $C_{16}H_{14}O_4Br_4$  1)  $\alpha\beta$ -Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]-äthan. Sm.  $209^\circ$  (*A.* 325, 37 *C.* 1903 [1] 461).  
 2)  $\alpha\beta$ -Dimethyläther d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan? Sm.  $160^\circ$  (*A.* 325, 38 *C.* 1903 [1] 461).

- $C_{16}H_{14}O_4S_2$  5) Dibenzyldisulfid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 198—200° (*C.* 1903 [2] 1272).
- $C_{16}H_{14}O_4S_3$  2) Dibenzyltrisulfid- $\alpha\alpha'$ -Dicarbonsäure (Trithiodiphenyllessigsäure). Sm. 145—148° (*C.* 1903 [2] 1271).
- $C_{16}H_{14}O_5N_2$  \*4) Dimethylester d. Azoxybenzol-2, 2'-Dicarbonsäure. Sm. 117° (corr.) (*A.* 326, 346 *C.* 1903 [1] 1130).
- 9)  $\alpha$ -Phenyl- $\beta$ -[2-Diazo-3-Oxy-4-Methoxyphenyl]akrylsäure. Zers. bei 150° (*B.* 35, 4413 *C.* 1903 [1] 343).
- 10) Dimethylester d. Azoxybenzol-3, 3'-Dicarbonsäure. Sm. 134° (136—136,5°) (*A.* 326, 344 *C.* 1903 [1] 1130; *B.* 36, 2313 *C.* 1903 [2] 430).
- 11) Dimethylester d. Azoxybenzol-4, 4'-Dicarbonsäure. Sm. 207° (corr.) (*A.* 326, 340 *C.* 1903 [1] 1130; *B.* 36, 2314 *C.* 1903 [2] 430).
- 12) Diacetat d. 4, 4'-Dioxyazoxybenzol. Sm. 169° (*B.* 36, 4150 *C.* 1904 [1] 187).
- $C_{16}H_{14}O_6N_2$  13) Dimethyläther d.  $\beta$ -Diamido-1, 3, 5, 7-Tetraoxy-9, 10-Anthrachinon (D.R.P. 155633 *C.* 1904 [2] 1487).
- $C_{16}H_{14}O_{10}N_4$  C 45,5 — H 3,3 — O 37,9 — N 13,3 — M. G. 422.
- 1) Dimethyläther d.  $\beta$ -Tetranitro-4, 4'-Dioxy-3, 3'-Dimethylbiphenyl. Sm. 130,5° (*Am.* 31, 127 *C.* 1904 [1] 809).
- $C_{16}H_{14}NCl$  \*4) Chlorbenzylat d. Chinolin. Sm. 170° (*Bl.* [3] 29, 135 *C.* 1903 [1] 584).
- $C_{16}H_{14}N_2S$  \*1) 2, 5-Dibenzyl-1, 3, 4-Thiodiazol. Sm. 98° (*J. pr.* [2] 69, 381 *C.* 1904 [2] 535).
- \*3) 2, 5-Di[4-Methylphenyl]-1, 3, 4-Thiodiazol. Sm. 156—158° (*J. pr.* [2] 69, 380 *C.* 1904 [2] 535).
- $C_{16}H_{14}N_2Se$  1) 3, 5-Di[4-Methylphenyl]-1, 2, 4-Selendiazol. Sm. 116° (*B.* 37, 2553 *C.* 1904 [2] 520).
- $C_{16}H_{14}N_4S$  2) 5-Merkapto-4-Phenylazo-3-Methyl-1-Phenylpyrazol (*B.* 37, 2775 *C.* 1904 [2] 711).
- $C_{16}H_{16}ON$  \*6) anti- $\alpha$ -Oximido- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten. Sm. 78° (*B.* 37, 731 *C.* 1904 [1] 1012; *M.* 25, 435 *C.* 1904 [2] 336).
- 31)  $\gamma$ -Oximido- $\alpha\beta$ -Diphenyl- $\alpha$ -Buten. Sm. 153° (*M.* 19, 410; 20, 739; 22, 667). — \*III, 185.
- 32) syn- $\alpha$ -Oximido- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten. Sm. 134° (*B.* 37, 732 *C.* 1904 [1] 1012; *M.* 25, 433 *C.* 1904 [2] 336).
- 33)  $\gamma$ -Keto- $\gamma$ -[4-Amidophenyl]- $\alpha$ -[4-Methylphenyl]propen. HCl (*B.* 37, 393 *C.* 1904 [1] 657).
- 34) d-1-Benzoyl-2-Methyl-2, 3-Dihydroindol. Sm. 119° (*Soc.* 85, 1335 *C.* 1904 [2] 1657).
- 35) l-1-Benzoyl-2-Methyl-2, 3-Dihydroindol. Sm. 119° (*Soc.* 85, 1333 *C.* 1904 [2] 1657).
- 36) Methyläther d. 3-Methyl-2-[4-Oxyphenyl]indol. Sm. 123° (*B.* 37, 870 *C.* 1904 [1] 1154).
- 37) Benzoyloxyhydrat d. Chinolin. Chlorid, d-Campfersulfonat (*Bl.* [3] 29, 135 *C.* 1903 [1] 584).
- 38) Phenylamid d.  $\beta$ -Phenylpropen- $\alpha$ -Carbonsäure. Sm. 121° (*B.* 37, 734 *C.* 1904 [1] 1012; *C. r.* 138, 987 *C.* 1904 [1] 1439).
- 39) Phenylamid d. Phenylisocrotonsäure. Sm. 89—90° (*B.* 37, 2001 *C.* 1904 [2] 24).
- $C_{16}H_{16}ON_3$  15) 5-Oxy-1-Phenyl-3-[ $\beta$ -Phenyläthyl]-1, 2, 4-Triazol. Sm. 182—183° (*B.* 36, 1102 *C.* 1903 [1] 1140).
- $C_{16}H_{16}OCl$  2)  $\gamma$ -Chlor- $\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -Methylpropan. Sm. 83° (*Am.* 31, 656 *C.* 1904 [2] 446).
- $C_{16}H_{16}OBr$  1) Methyläther d.  $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 51 bis 52° (*B.* 37, 228 *C.* 1904 [1] 659).
- $C_{16}H_{16}O_2N$  \*35) Imid d. Phenyllessigsäure. Sm. 195° (*B.* 36, 747 *C.* 1903 [1] 827).
- 50)  $\gamma$ -[3-Oxyphenyl]imido- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 160° (*B.* 36, 2451 *C.* 1903 [2] 670).
- 51) 4-Propionylamidodiphenylketon. Sm. 139° (*C.* 1903 [1] 1137).
- 52) 4-Acetylamido-3-Methyldiphenylketon. Sm. 175° (*Soc.* 85, 593 *C.* 1904 [1] 1554).
- 53) 6-Acetylamido-3-Methyldiphenylketon. Sm. 159° (*Soc.* 85, 595 *C.* 1904 [1] 1554).
- 54) Äthyl-4-Benzoylamidophenylketon. Sm. 190° (*C.* 1903 [1] 1223).

- $C_{16}H_{15}O_2N$  55) 3-Keto-1-Oxy-2-Aethyl-1-Phenyl-1,2-Dihydroisoindol. Sm. 166 bis 167° HCl (B. 37, 388 C. 1904 [1] 669).
- $C_{16}H_{15}O_2N_3$  23) Benzylidenhydrazid d. 2-Acetylamidobenzol-1-Carbonsäure. Sm. 180° u. Zers. (J. pr. [2] 69, 98 C. 1904 [1] 729).
- $C_{16}H_{15}O_3N$  \*18) r- $\alpha$ -Benzoylamido- $\beta$ -Phenylpropionsäure. Sm. 185° (B. 36, 4313 C. 1904 [1] 448).
- 49) 10-Nitro-9-Oxy-9-Aethyl-9,10-Dihydroanthracen. Sm. 166° u. Zers. (A. 330, 172 C. 1904 [1] 891).
- 50) 3-Methyläther d. Methyl-4-[3,4-Dioxybenzyliden]amidophenylketon. Sm. 167° (B. 37, 396 C. 1904 [1] 658).
- 51)  $\gamma$ -Oximido- $\alpha\gamma$ -Diphenylbuttersäure. Sm. 83–87°. +  $C_6H_6$  (Soc. 85, 1364 C. 1904 [2] 1646).
- 52) Methylester d. 4-Benzoyl-2-Methylphenylamidoameisensäure. Sm. 107° (Soc. 85, 593 C. 1904 [1] 1554).
- 53) Methylester d. 2-Benzoyl-4-Methylphenylamidoameisensäure. Sm. 110° (Soc. 85, 596 C. 1904 [1] 1554).
- 54) Aethylester d. Phenylbenzoylamidoameisensäure. Sm. 67–68° (Am. 30, 35 C. 1903 [2] 363).
- 55) Phenylmonamid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 170 bis 171° (Soc. 85, 1367 C. 1904 [2] 1646).
- $C_{16}H_{15}O_3N_3$  56) Benzoylhydrazid d. Benzoylamidoessigsäure. Sm. 213° (J. pr. [2] 70, 106 C. 1904 [2] 1036).
- 57) 2-Oxybenzylidenhydrazid d. 2-Oxybenzylidenamidoessigsäure. Sm. 189–191° (J. pr. [2] 70, 104 C. 1904 [2] 1036).
- $C_{16}H_{15}O_4N$  26) Dimethyläther d. 10-Nitro-9,9-Dioxy-9,10-Dihydroanthracen. Sm. 135° u. Zers. (A. 330, 183 C. 1904 [1] 892).
- 27)  $\alpha$ -Phenyl- $\beta$ -[2-Amido-3-Oxy-4-Methoxyphenyl]akrylsäure. Sm. 180° (B. 35, 4413 C. 1903 [1] 343).
- 28) 4-Acetylamidophenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 181° (D.R.P. 70714). — \*II, 919.
- 29) 4-Acetylamidophenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 188° (D.R.P. 70714). — \*II, 920.
- 30) 4-Acetylamidophenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 188° (D.R.P. 70714). — \*II, 922.
- 31)  $\alpha$ -Phenylamidoformiat d. 3,4-Dioxy-1-[ $\alpha$ -Oxyäthyl]benzol-3,4-Methylenäther. Sm. 65–67° (B. 36, 3595 C. 1903 [2] 1365).
- 32) 4-Aethoxyphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 160 bis 165° (B. 36, 998 C. 1903 [1] 1131).
- $C_{16}H_{15}O_4N_3$  11)  $\alpha$ -[2,4-Dinitrophenyl]- $\beta$ -[4-Dimethylamidophenyl]äthen. Sm. 181° (B. 37, 1744 C. 1904 [1] 1599).
- 12) Aethyläther d. Benzoylimido-3-Nitrophenylamidooxymethan. Sm. 86–88° (Am. 32, 366 C. 1904 [2] 1507).
- 13)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxy-3-Methylbenzyliden]hydrazin. Sm. 241–242° (B. 37, 3919 C. 1904 [2] 1594).
- 14)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-4-Oxy-3-Methylbenzyliden]hydrazin. Sm. 188–189° (B. 37, 3928 C. 1904 [2] 1595).
- 15)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-6-Oxy-3-Methylbenzyliden]hydrazin. Sm. 252–253° (B. 37, 3924 C. 1904 [2] 1595).
- 16) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxy-3-Methylbenzyliden]hydrazin. Sm. 205–206° (B. 37, 3920 C. 1904 [2] 1594).
- 17) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-4-Oxy-3-Methylbenzyliden]hydrazin. Sm. 162–163° (B. 37, 3928 C. 1904 [2] 1595).
- 18) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-6-Oxy-3-Methylbenzyliden]hydrazin. Sm. 155–156° (B. 37, 3924 C. 1904 [2] 1595).
- $C_{16}H_{15}O_6N$  \*15) Diacetat d. 5-Acetylamido-1,4-Dioxynaphtalin. Sm. 165° (A. 335, 150 C. 1904 [2] 1130).
- 17) Methylbetaïn d. 2-[3,4-Dimethoxybenzoyl]pyridin-4-Carbonsäure +  $3H_2O$  (M. d. Pyropavaverinsäure.  $(2HCl, PtCl_4 + 2H_2O)$  (M. 24, 702 C. 1903 [2] 1262; M. 24, 715 C. 1904 [1] 218).
- $C_{16}H_{15}O_6N_3$  5) 4-Methyläther d. 5-Nitro-3-Acetoxy-4-Oxy-1-Phenylhydrazonmethylbenzol. Sm. 165° (B. 35, 4394 C. 1903 [1] 311).
- $C_{16}H_{15}O_6N$  3) Diäthylester d. 4-Nitronaphtalin-1,8-Dicarbonsäure. Sm. 86° (A. 327, 82 C. 1903 [1] 1227).

- $C_{16}H_{15}N_2Br$  3)  $\alpha$ -Brom- $\gamma$ -Phenylhydrazon- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 97° u. Zers. (Soc. 85, 464 C. 1904 [1] 1438).
- $C_{16}H_{15}N_3S$  \*3) Aethyläther d. 3-Merkapto-1,5-Diphenyl-1,2,4-Triazol. Sm. 99 bis 100° (J. pr. [2] 67, 242 C. 1903 [1] 1263).
- 4) 4-Aethyl-1,5-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfd. Sm. 232° (J. pr. [2] 67, 227 C. 1903 [1] 1261).
- 5) 5-Methyl-1-Phenyl-4-Benzyl-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfd. Sm. 205° (J. pr. [2] 67, 256 C. 1903 [1] 1265).
- $C_{16}H_{16}ON_2$  37)  $\alpha$ -Methylimido- $\alpha$ -Benzoylmethylamido- $\alpha$ -Phenylmethan. Sm. 116 bis 117,5° (2HCl, PtCl<sub>4</sub>) (Soc. 83, 324 C. 1903 [1] 581, 876).
- 38) Methyläther d.  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenyl]propen. Sm. 136 bis 137° (B. 36, 853 C. 1903 [1] 976).
- 39) Aethyläther d. 6-Oxy-1-[2-Methylphenyl]benzimidazol. Sm. 77 bis 78° (B. 36, 3862 C. 1904 [1] 91).
- 40) Anhydro-2-Methylamidobenzol-1-Carbonsäurealdehyd. Sm. 139,5 bis 140° (B. 37, 985 C. 1904 [1] 1079).
- $C_{16}H_{16}O_2N_2$  \*23) Dimethyläther d. Di[4-Oxybenzyliden]hydrazin. Sm. 160° (B. 37, 3422 C. 1904 [2] 1294).
- \*47)  $\gamma$ -Diphenylamid d. Bernsteinsäure. Sm. 226° (C. 1903 [2] 432).
- \*51) s-Di[4-Methylphenylamid] d. Oxalsäure. Sm. 263° (A. 332, 265 C. 1904 [2] 700).
- \*64) s-Di[2-Methylbenzoyl]hydrazin. Sm. 217° (J. pr. [2] 69, 372 C. 1904 [2] 534).
- \*65) s-Di[3-Methylbenzoyl]hydrazin. Sm. 214—216° (J. pr. [2] 69, 373 C. 1904 [2] 534).
- \*66) s-Di[4-Methylbenzoyl]hydrazin. Sm. 250° (J. pr. [2] 69, 374 C. 1904 [2] 534).
- \*70)  $\alpha\beta$ -Dibenzoyl- $\alpha$ -Aethylhydrazin. Sm. 133° (J. pr. [2] 70, 278 C. 1904 [2] 1545).
- 75) Di[6-Oxy-3-Methylbenzyliden]hydrazin. Sm. 122° (B. 37, 3187 C. 1904 [2] 991).
- 76) Monoacetylderivat d.  $\alpha$ -Keto- $\alpha\beta$ -Di[4-Amidophenyl]äthan. Sm. 198 bis 205° (A. 325, 75 C. 1903 [1] 463).
- 77) 4-Oxy-3-Acetylphenylhydrazonmethyl-1-Methylbenzol. Sm. 126° (B. 35, 4106 C. 1903 [1] 149).
- 78) Di[2-Oxy-3-Methylbenzyliden]hydrazin. Sm. 229° (B. 35, 4106 C. 1903 [1] 149).
- 79) 5-Methyläther d. 5,6-Dioxy-3-Allylazobenzol (Benzolazoeugenol). Sm. 76—77° (B. 37, 4135 C. 1904 [2] 1736).
- 80) 5-Methyläther d. 5,6-Dioxy-3-Propenylazobenzol (Benzolazoisoeugenol) (B. 37, 4135 C. 1904 [2] 1736).
- 81) 4-Methylphenylimido-4-Methylphenylamidoessigsäure (Soc. 85, 995 C. 1904 [2] 831).
- 82) Phenylamid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 163—165° (J. pr. [2] 70, 147 C. 1904 [2] 1394).
- $C_{16}H_{16}O_2N_4$  \*13) Aethyl ester d.  $\alpha$ -Phenylazo- $\alpha$ -Phenylhydrazonessigsäure. Sm. 116—117° (Bl. [3] 31, 83 C. 1904 [1] 580).
- 24) Benzylidenhydrazid d.  $\beta$ -Phenylureidoessigsäure. Sm. 227° u. Zers. (J. pr. [2] 70, 248 C. 1904 [2] 1463).
- $C_{16}H_{16}O_2Br_2$  3) Di[2-Brom-4-Methylphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 156° (B. 36, 2875 C. 1903 [2] 834).
- $C_{16}H_{16}O_2S_2$  1)  $\alpha\alpha$ -Dimerkaptopropionphenylbenzyläthersäure. Sm. 72° (B. 36, 302 C. 1903 [1] 500).
- $C_{16}H_{16}O_3N_2$  48) Phenylamid d.  $\alpha$ -Phenylamidiformoxylpropionsäure. Sm. 155—156° (Bl. [3] 29, 124 C. 1903 [1] 564).
- $C_{16}H_{16}O_3N_4$  5) Methyläther d.  $\alpha$ -Phenylamidiformylimido- $\alpha$ -Phenylureido- $\alpha$ -Oxymethan. Sm. 153°. 3HCl (C. 1904 [2] 29).
- 6)  $\alpha$ -[3-Nitrobenzyliden]amido- $\beta$ -Aethyl- $\alpha$ -Phenylharnstoff. Sm. 153° (B. 36, 1377 C. 1903 [1] 1344).
- $C_{16}H_{16}O_3Cl_2$  1)  $\delta$ -Acetat d. isom.  $\gamma\gamma$ -Dichlor- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 98° (B. 36, 2396 C. 1903 [2] 493).
- $C_{16}H_{16}O_3S$  2) Aldehyd d.  $\beta$ -[4-Methylphenyl]sulfon- $\beta$ -Phenylpropionsäure. Sm. 78° (Am. 31, 170 C. 1904 [1] 876). — \*III, 66.

- $C_{16}H_{18}O_4N_2$  \*27) Di[Phenylamid] d. d-Weinsäure. Sm. 250° u. Zers. (*Soc.* 83, 1355 C. 1904 [1] 84).
- 43)  $\alpha$ -[ $\beta$ -Phenylureido]- $\beta$ -[4-Oxyphenyl]propionsäure +  $\frac{1}{2}H_2O$ . Sm. 104°. Ba + 6H<sub>2</sub>O, Ag + H<sub>2</sub>O (*B.* 36, 3344 C. 1903 [2] 1175).
- 44) Phenylhydrazon d. Maticosäurealdehyd. Sm. 163° (*B.* 35, 4359 C. 1903 [1] 331).
- 45) Phenylhydrazon d. Verb.  $C_{16}H_{16}O_6$ . Sm. 249° (*B.* 36, 3231 C. 1903 [2] 941).
- 46) Aethylester d. 4,6-Dioxy-2-Methylazobenzol-3-Carbonsäure. Sm. 142° (*B.* 37, 1418 C. 1904 [1] 1417).
- $C_{16}H_{16}O_4S$  7)  $\beta$ -[4-Methylphenyl]sulfon- $\beta$ -Phenylpropionsäure. Sm. 197—198°. Na + 2H<sub>2</sub>O, Ca, Ba + 4H<sub>2</sub>O (*Am.* 31, 171 C. 1904 [1] 876).
- $C_{16}H_{16}O_4S_2$  3) Cyklodi-o-Xylylendisulfon. Sm. oberh. 320° (*B.* 36, 187 C. 1903 [1] 467).
- $C_{16}H_{16}O_5N_2$  7) 1-Phenacetylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 216—217° u. Zers. (*B.* 35, 4320 C. 1903 [1] 336).
- $C_{16}H_{16}O_5N_4$  2)  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -[2,4-Dinitrophenyl]butan. Sm. 227° u. Zers. (*M.* 23, 1005 C. 1903 [1] 292).
- $C_{16}H_{16}O_7N_4$  4) 4-Dimethylamidobenzaldehyd + 2,4,6-Trinitro-1-Methylbenzol. Sm. 60° (*B.* 37, 1745 C. 1904 [1] 1600).
- $C_{16}H_{16}O_8N_2$  C 52,7 — H 4,4 — O 35,2 — N 7,7 — M. G. 364.
- 1) 2,5,2',5'-Tetramethyl-1,1'-Bipyrrol-3,4,3',4'-Tetracarbonsäure + H<sub>2</sub>O. Sm. oberh. 290° u. Zers. (*B.* 37, 2700 C. 1904 [2] 532).
- $C_{16}H_{16}N_2S_2$  5) Diphenyläther d.  $\alpha\delta$ -Diimido- $\alpha\delta$ -Dimerkaptobutan. HCl (*B.* 36, 3467 C. 1903 [2] 1244).
- 6) Aethyläther d. 5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thio-diazol. Sm. 70° (*J. pr.* [2] 67, 240 C. 1903 [1] 1263).
- $C_{16}H_{16}N_2S_3$  1) Dimethyläther d. Di[Phenylimidomerkaptomethyl]sulfid. Sm. 84—85° (*B.* 36, 2285 C. 1903 [2] 561).
- 2) Sulfid d. Methylphenylamidodithioameisensäure. Sm. 150—151° (*B.* 36, 2281 C. 1903 [2] 560).
- $C_{16}H_{16}N_2S_4$  \*1) Dimethyläther d. Di[Phenylimidomerkaptomethyl]disulfid. Sm. 123° (*B.* 36, 2264 C. 1903 [2] 562).
- \*3) Disulfid d. Methylphenylamidodithioameisensäure. Sm. 198° (*B.* 36, 2274 C. 1903 [2] 563).
- $C_{16}H_{16}N_4S$  6) 2,5-Di[4-Amidobenzyl]-1,3,4-Thiodiazol. Sm. 148° (*B.* 35, 3940 C. 1903 [1] 39).
- $C_{16}H_{16}Br_2S_2$  1) Cyklodi-o-Xylylendibromdisulfid. Sm. 110—112° (*B.* 36, 187 C. 1903 [1] 467).
- $C_{16}H_{17}ON$  64) Aethyläther d.  $\alpha$ -[4-Oxyphenyl]imido- $\alpha$ -Phenyläthan. Sm. 88°; Sd. 210—212°<sub>73</sub> (D.R.P. 87897, 98840). — \*III, 99.
- 65) Aethyläther d.  $\alpha$ -Benzylimido- $\alpha$ -Oxy- $\alpha$ -Phenylmethan. Sd. 186 bis 188°<sub>12</sub> (*Soc.* 83, 328 C. 1903 [1] 581, 876).
- 66)  $\alpha$ -Oximido- $\alpha\gamma$ -Diphenylbutan. Sm. 93° (*Am.* 31, 655 C. 1904 [2] 446).
- 67) Benzylamid d.  $\beta$ -Phenylpropionsäure. Sm. 85° (*B.* 37, 2704 C. 1904 [2] 518).
- 68) Aethylbenzylamid d. Benzolcarbonsäure. Sd. 214—216°<sub>12</sub> (*Soc.* 83, 408 C. 1903 [1] 833).
- 69) Aethyl-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 71—72° (*Soc.* 83, 408 C. 1903 [1] 833).
- 70) Aethyl-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 38—40° (*Soc.* 83, 408 C. 1903 [1] 833).
- $C_{16}H_{17}ON_3$  18) 5-Acetylamido-2-Methyl-N-Aethyl- $\alpha$ - oder - $\beta$ -Naphtimidazol +  $\frac{1}{2}H_2O$ . Sm. 184—185°. (HCl, AuCl<sub>3</sub>), Pikrat (*Soc.* 83, 1188 C. 1903 [2] 1444).
- $C_{16}H_{17}O_2N$  \*27) Phenylamidoformiat d. 4-[ $\alpha$ -Oxyäthyl]-1-Methylbenzol. Sm. 95—96° (*B.* 36, 1636 C. 1903 [2] 26).
- 34)  $\gamma$ -Hydroxylamido- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylbutan (Dypnonhydroxylamin). Sm. 109—110° (112°). Oxalat (*C.* 1903 [1] 521; *A.* 330, 229 C. 1904 [1] 944).
- 35) Methyläther d. 4-Dimethylamido-3'-Oxydiphenylketon. Sm. 67° (D.R.P. 65952). — \*III, 153.
- 36) Phenylamidoformiat d.  $\alpha$ -Oxyisopropylbenzol. Sm. 113° (*B.* 36, 1863 Anm. C. 1903 [2] 286).

- $C_{16}H_{17}O_2N_3$  29) 4-Methylphenylamid d.  $\beta$ -Phenylureidoessigsäure. Sm. 229° (*J. pr.* [2] 70, 250 *C.* 1904 [2] 1463).
- $C_{16}H_{17}O_3N$  19) 1-Methyläther d. 4-[Acetyl-2-Oxybenzyl]amido-1-Oxybenzol. Sm. 98° (*Ar.* 240, 682 *C.* 1903 [1] 395).
- 20) Phenylamidoformiat d. 3,4-Dioxy-1-Propylbenzol. Sm. 142° (*C. r.* 138, 425 *C.* 1904 [1] 798).
- 21)  $\alpha$ -Phenylamidoformiat d. 2-Oxy-1-[ $\alpha$ -Oxyäthyl]benzol-2-Methyläther. Sm. 106° (*B.* 36, 3588 *C.* 1903 [2] 1365).
- 22)  $\alpha$ -Phenylamidoformiat d. 3-Oxy-1-[ $\alpha$ -Oxyäthyl]benzol-3-Methyläther. Fl. (*B.* 36, 3591 *C.* 1903 [2] 1366).
- 23)  $\alpha$ -Phenylamidoformiat d. 4-Oxy-1-[ $\alpha$ -Oxyäthyl]benzol-4-Methyläther. Sm. 82—83° (*B.* 36, 3592 *C.* 1903 [2] 1366).
- 24) 4-Aethoxyphenylimid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbon-säure. Sm. 137° (*B.* 36, 1005 *C.* 1903 [1] 1132).
- $C_{16}H_{17}O_3N_3$  4) Benzylester d.  $\beta$ -Phenylureidomethylamidoameisensäure. Sm. 204° (*J. pr.* [2] 70, 252 *C.* 1904 [2] 1464).
- 5) Phenylamidoformiat d.  $\alpha$ -[ $\beta$ -Oxyäthyl]- $\beta$ -Phenylharnstoff. Sm. 195° (*B.* 36, 1280 *C.* 1903 [1] 1215).
- $C_{16}H_{17}O_4N$  6) 4-Aethoxyphenylamidomethyl-3,4-Dioxyphenylketon. Sm. 105° (*D.R.P.* 71312). — \*III, 109.
- 7) Aethylester d.  $\alpha$ -Cyan- $\beta$ -Butyroxyl- $\beta$ -Phenylakrylsäure. Fl. (*Bl.* [3] 31, 337 *C.* 1904 [1] 1135).
- $C_{16}H_{17}N_3S$  7) Methyläther d.  $\alpha$ -[ $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazido]- $\alpha$ -Methyl-imido- $\alpha$ -Merkaptomethan. Sm. 136—137° (*B.* 37, 2332 *C.* 1904 [2] 314).
- 8)  $\alpha$ -Benzylidenamido- $\beta$ -Methyl- $\alpha$ -Benzylthioharnstoff. Sm. 147° (*B.* 37, 2327 *C.* 1904 [2] 313).
- $C_{16}H_{17}N_3S_2$  1) Methyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Merkaptomethan. Sm. 114—115° (*Am.* 30, 179 *C.* 1903 [2] 872).
- 2) Methyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -Merkaptomethan. Sm. 93° (*Am.* 30, 174 *C.* 1903 [2] 871).
- 3) Methyläther d.  $\alpha$ -Phenylamidothioformylimido- $\alpha$ -Methylphenyl-amido- $\alpha$ -Merkaptomethan. Sm. 133—134° (*Am.* 30, 177 *C.* 1903 [2] 872).
- 4) Methyläther d.  $\alpha$ -[4-Methylphenylthioureido]- $\alpha$ -Phenylimido- $\alpha$ -Merkaptomethan. Sm. 114—115° (*Am.* 30, 180 *C.* 1903 [2] 872).
- 5) Aethyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -Phenylimido- $\alpha$ -Merkapto-methan. Sm. 91—93° (*Am.* 30, 181 *C.* 1903 [2] 873).
- 6) Dimethyläther d. Di[Phenylimidomerkaptomethyl]amin. Sm. 103 bis 104°. HJ (*Am.* 30, 177 *C.* 1903 [2] 872).
- $C_{16}H_{17}ClJ_2$  2)  $\beta$ -Jod-2-Methylphenyl-4-Aethylphenyljodoniumchlorid. 2 +  $HgCl_2$ , 2 +  $PtCl_4$  (*A.* 327, 296 *C.* 1903 [2] 352).
- $C_{16}H_{17}BrJ_2$  2)  $\beta$ -Jod-2-Methylphenyl-4-Aethylphenyljodoniumbromid. Sm. 120° (*A.* 327, 296 *C.* 1903 [2] 352).
- $C_{16}H_{18}ON_2$  \*8)  $\alpha$ -Phenylamido- $\beta$ -Phenylacetylamidoäthan. Sm. 128° (*A.* 332, 213 *C.* 1904 [2] 212).
- \*47) Phenylamid d.  $\beta$ -Phenylamidobuttersäure. Sm. 93°. HCl (*B.* 36, 1266 *C.* 1903 [1] 1219).
- \*49) Benzylamid d. Benzylamidoessigsäure. HCl (*Ar.* 240, 633 *C.* 1903 [1] 24).
- 74) 5-Oxy-6-Phenylhydrazonmethyl-1,2,4-Trimethylbenzol. Sm. 144° (*B.* 35, 4104 *C.* 1903 [1] 149).
- 75) 2-Amido-5-Oxy-3,7,10-Trimethyl-5,10-Dihydroakridin. Sm. 184° (*C.* 1904 [1] 676).
- 76) Phenylamid d.  $\beta$ -Phenylamidoisobuttersäure. Sm. 120° (122°) (*B.* 24, 1042; *B.* 36, 1270 *C.* 1903 [1] 1219).
- 77) Phenylhydrazid d.  $\alpha$ 1- $\beta$ -Phenylisobuttersäure. Sm. 116—117° (*Sec.* 85, 446 *C.* 1904 [1] 1445).
- $C_{16}H_{18}ON_4$  9) 3,8-Di[Dimethylamido]diphenazonoxyd. Sm. 242° (*B.* 37, 30 *C.* 1904 [1] 524).
- $C_{16}H_{18}OJ_2$  2)  $\beta$ -Jod-2-Methylphenyl-4-Aethylphenyljodoniumhydrat. Salze siehe (*A.* 327, 295 *C.* 1903 [2] 352).
- $C_{16}H_{18}O_2N_2$  \*13) Diäthyläther d. 4,4'-Dioxyazobenzol. Sm. 158° (*B.* 36, 3163 *C.* 1903 [2] 947).
- \*25) Mesoporphyrin (*H.* 43, 11 *C.* 1904 [2] 1572).

- $C_{16}H_{18}O_2N_2$  26) Dimethyläther d. 2,2'-Di[Oxymethyl]azobenzol. Sm. 68,5° (*C. r.* 137, 522 *C. 1903* [2] 1060).
- $C_{16}H_{18}O_2N_4$  25) 4,4'-Di[Aethylnitrosamido]biphenyl. Sm. 163° (*C. 1903* [1] 1128; *B. 35*, 4184 *C. 1903* [1] 143).
- 26) 3-Amido-4-Methylphenylamid d.  $\beta$ -Phenylureidoessigsäure. Sm. 193° (*J. pr.* [2] 70, 251 *C. 1904* [2] 1463).
- 27) Di[2-Amidophenylamid] d. Bernsteinsäure. 2HCl (*A. 327*, 22 *C. 1903* [1] 1336).
- 28) Di[3-Amido-4-Methylphenylamid] d. Oxalsäure. Sm. 180° (*D.R.P.* 156177 *C. 1904* [2] 1675).
- $C_{16}H_{18}O_3N_2$  \*8) Diäthyläther d. 4,4'-Dioxyazoxybenzol. Sm. 137,4—137,9° (*B. 37*, 46 *C. 1904* [1] 654).
- $C_{16}H_{18}O_4N_4$  \*4) Di[Phenylhydrazid] d. d-Weinsäure. Sm. 245° (231° u. Zers.) (*R. 21*, 312 *C. 1903* [1] 137; *Soc. 83*, 1363 *C. 1904* [1] 84).
- \*5) 2,2'-Dinitro-4,4'-Di[Dimethylamido]biphenyl. Sm. 229,5° (*B. 37*, 29 *C. 1904* [1] 523).
- 6) Ricinin (Ricidin) oder  $C_{16}H_{18}O_4N_4$ . Sm. 194° (193°). + 2HgCl<sub>2</sub> (*C. 1895* [1] 853; 1900 [1] 612; *B. 30*, 2197; *J. 1864*, 457; 1870, 877). — III, 951; \*III, 690.
- 7) Di[Phenylhydrazid] d. Traubensäure. Sm. 220° (*R. 21*, 312 *C. 1903* [1] 137).
- $C_{16}H_{18}O_4S_2$  5)  $\beta$ -Phenylsulfon- $\beta$ -Benzylsulfonpropan. Sm. 125—126° (*B. 36*, 304 *C. 1903* [1] 500).
- 6)  $\alpha\alpha$ -Di[Benzylsulfon]äthan. Sm. 130° (*B. 36*, 298 *C. 1903* [1] 499).
- $C_{16}H_{18}O_6N_4$  3) Diäthylamidobenzol + 1,3,5-Trinitrobenzol. Sm. 42—42,5° (*Soc. 83*, 1342 *C. 1904* [1] 100).
- $C_{16}H_{18}O_9N_2$  1) Säure (aus Nitrocodein) (*B. 36*, 3068 *C. 1903* [2] 953).
- $C_{16}H_{18}N_4Cl_2$  1) Chlormethylat d. Verb.  $C_{16}H_{16}N_4Cl$ . HCl + 2H<sub>2</sub>O, (HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (*B. 37*, 557 *C. 1904* [1] 893).
- $C_{16}H_{18}ClJ$  3) 2-Methylphenyl-4-Propylphenyljodoniumchlorid. Sm. 133° u. Zers. 2 + PtCl<sub>4</sub> (*A. 327*, 313 *C. 1903* [2] 353).
- 4) Di[4-Aethylphenyl]jodoniumchlorid. Sm. 150°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> + 3H<sub>2</sub>O (*A. 327*, 290 *C. 1903* [2] 352).
- 5) 2,4'-Dimethyl-2'-Aethylidiphenyljodoniumchlorid. Sm. 177°. 2 + PtCl<sub>4</sub> (*J. pr.* [2] 69, 445 *C. 1904* [2] 590).
- $C_{16}H_{18}BrJ$  3) 2-Methylphenyl-4-Propylphenyljodoniumbromid. Sm. 133° u. Zers. (*A. 327*, 313 *C. 1903* [2] 353).
- 4) Di[4-Aethylphenyl]jodoniumbromid. Sm. 145° (*A. 327*, 290 *C. 1903* [2] 352).
- 5) 2,4'-Dimethyl-2'-Aethylidiphenyljodoniumbromid. Sm. 175° (*J. pr.* [2] 69, 445 *C. 1904* [2] 590).
- $C_{16}H_{19}ON$  11) 5-[2-Oxybenzyl]amido-1,2,4-Trimethylbenzol. Sm. 172—173° (*Ar. 240*, 688 *C. 1903* [1] 395).
- $C_{16}H_{19}OJ$  3) 2,4'-Dimethyl-2'-Aethylidiphenyljodoniumhydroxyd. Salze siehe (*J. pr.* [2] 69, 444 *C. 1904* [2] 590).
- $C_{16}H_{19}O_2N$  15) 4-Phenylimido-6-Oxy-5-Acetyl-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 129—130° (*B. 37*, 3381 *C. 1904* [2] 1219).
- 16) Benzoat d. Pulegenonoxim. Sm. 104—105° (*A. 327*, 133 *C. 1903* [1] 1412).
- $C_{16}H_{19}O_3N_3$  5) Acetat d. 5-Oxy-1-Phenyl-3-Hexahydrophenyl-1,2,4-Triazol. Sm. 107—108° (*B. 36*, 1097 *C. 1903* [1] 1140).
- $C_{16}H_{19}O_4N$  12) 4-Aethoxyphenylmonamid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonensäure. Sm. 145° (*B. 36*, 999 *C. 1903* [1] 1131).
- $C_{16}H_{19}O_5N_3$  C 50,4 — H 5,0 — O 34,6 — N 11,0 — M. G. 381.
- 1) Verbindung (aus Cyanessigsäuremethylester u. Acetylcyanessigsäuremethylester). Sm. 135° (*Bl. 3* [3] 31, 530 *C. 1904* [1] 1554).
- $C_{16}H_{19}O_6N$  C 52,0 — H 5,1 — O 39,0 — N 3,8 — M. G. 369.
- 1) Diäthylester d. Mono[3-Nitro-4-Methylbenzoyl]weinsäure. Sm. 104 bis 105° (*Soc. 83*, 172 *C. 1903* [1] 389, 628).
- $C_{16}H_{19}NCl$  1) 2-[ $\alpha$ -Chloräthyl]-1,3,5-Trimethylbenzol + Pyridin. Sm. 107—108°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub>, + CdJ<sub>2</sub> (*B. 36*, 1642 *C. 1903* [2] 27).
- $C_{16}H_{19}N_4Cl$  1) Chlormethylat d. Verbind.  $C_{16}H_{16}N_4$ . HCl + 2H<sub>2</sub>O, + HgCl<sub>2</sub> (*B. 37*, 553 *C. 1904* [1] 893).

- $C_{16}H_{20}ON_2$  \*17) Aethyläther d. 6-Oxy-3,4'-Dimethyl-s-Diphenylhydrazin. Sm. 55 (B. 36, 3856 C. 1904 [1] 90).
- \*21) Phenylhydrazoncampher. Enolform Sm. 180—181° (Soc. 81, 1514 C. 1903 [1] 162).
- 26) Aethyläther d. 4-Oxy-2,2'-Dimethyl-s-Diphenylhydrazin. Sm. 80° (B. 36, 3854 C. 1904 [1] 90).
- $C_{16}H_{20}ON_4$  6) Methyloxyhydrat d. 3-Amido-7-Dimethylamido-2-Methyl-5,10-Naphthdiazin. Nitrat (A. 327, 123 C. 1903 [1] 1221).
- 7) Methylhydroxyd d. Verb.  $C_{16}H_{18}N_4$ . Chlorid, Nitrat (B. 37, 553 C. 1904 [1] 893).
- $C_{16}H_{20}O_2N_2$  13) Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Amidophenyl]äthan. Sm. 203 bis 204° (A. 325, 48 Anm. C. 1903 [1] 462).
- $C_{16}H_{20}O_5N_2$  \*1) 2-Naphtylhydrazon d. Galaktose. Sm. 189° (B. 35, 4446 C. 1903 [1] 392).
- \*3) 2-Naphtylhydrazon d. d-Glykose. Sm. 178—179° (B. 35, 4446 C. 1903 [1] 392).
- \*4) isom. 2-Naphtylhydrazon d. d-Glykose. Sm. 95,5° (B. 37, 3854 C. 1904 [2] 1711).
- 7) 2-Naphtylhydrazon d. Lävulose. Sm. 161—162° (B. 35, 4445 C. 1903 [1] 392).
- 8) 2-Naphtylhydrazon d. d-Mannose. Sm. 186—187° u. Zers. (B. 36, 3202 C. 1903 [2] 1055).
- $C_{16}H_{20}O_6N_2$  2) Dilaktam d.  $\delta\delta$ -Diimidooktan- $\gamma\gamma\zeta\zeta$ -Tetracarbonsäure- $\gamma\zeta$ -Diäthylester. Sm. 156° (A. 332, 127 C. 1904 [2] 189).
- $C_{16}H_{20}NBr$  1) l-Methyläthylphenylbenzylammoniumbromid. Sm. 155—156° (Soc. 85, 231 C. 1904 [1] 938).
- 2) i-Methyläthylphenylbenzylammoniumbromid. Sm. 155—156° (Soc. 85, 231 C. 1904 [1] 938).
- $C_{16}H_{20}NJ$  1) Dimethyldibenzylammoniumjodid. Sm. 186—187,5° (Soc. 83, 1413 C. 1904 [1] 438).
- 2) d-Methyläthylphenylbenzylammoniumjodid. Sm. 146—147° (Soc. 83, 1419 C. 1904 [1] 439; Soc. 85, 227 C. 1904 [1] 652, 938).
- 3) l-Methyläthylphenylbenzylammoniumjodid. Sm. 146—147° (Soc. 85, 228 C. 1904 [1] 652, 938).
- 4) i-Methyläthylphenylbenzylammoniumjodid. Sm. 145—146° (140,5°) (Soc. 83, 1419 C. 1904 [1] 439; Soc. 85, 224 C. 1904 [1] 652, 938; A. 334, 238 C. 1904 [2] 900).
- $C_{16}H_{20}N_2Cl_2$  1) Diphenochinon-NN'-Tetramethyldiimoniumchlorid.  $2 + PtCl_4 + 2H_2O$  (B. 37, 3769 C. 1904 [2] 1547).
- $C_{16}H_{20}N_2J_2$  1) Diphenochinon-NN'-Tetramethyldiimoniumjodid.  $+ J_2$  (B. 37, 3769 C. 1904 [2] 1547).
- $C_{16}H_{21}ON$  \*8) Phenylamid d. Pulegensäure. Sm. 124° (A. 227, 128 C. 1903 [1] 1412).
- 9) d-Methyläthylphenylbenzylammoniumhydroxyd. d-Camphersulfonat (Soc. 83, 1419 C. 1904 [1] 439; Soc. 85, 226 C. 1904 [1] 652, 938).
- 10) l-Methyläthylphenylbenzylammoniumhydroxyd. l-Camphersulfonat (Soc. 85, 226 C. 1904 [1] 652, 938).
- 11) l-Oximido-5-Methyl-3-[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 124° (A. 303, 243). — \*III, 140.
- $C_{16}H_{21}ON_3$  \*1) Phenylhydrazon d. Oximidocampher. Sm. 138° (Soc. 85, 909 C. 1904 [2] 597).
- 2) 4-[1-Piperidyl]-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 145° (D.R.P. 145 603 C. 1903 [2] 1225).
- $C_{16}H_{21}O_2N$  14) Benzoat d.  $\alpha$ -Methyltropin. HCl (A. 326, 10 C. 1903 [1] 778).
- 15) Benzoat d. Pseudomethyltropin. HCl (A. 326, 18 C. 1903 [1] 778).
- $C_{16}H_{21}O_5N_3$  3) Methylester d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amido-propionsäure. Sm. 180—181° (J. pr. [2] 70, 123 C. 1904 [2] 1037).
- $C_{16}H_{22}O_2N_2$  9) Diphenochinon-NN'-Tetramethyldiimoniumhydrat. Salze (B. 37, 3768 C. 1904 [2] 1547).
- $C_{16}H_{22}O_8N_4$  C 60,4 — H 6,9 — O 15,1 — N 17,6 — M. G. 318.
- 1) Isopropylidenhydrazid d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 145° (J. pr. [2] 70, 209 C. 1904 [2] 1460).
- $C_{16}H_{22}O_8S_2$  1) Diäthylester d. l,3-Phenylendi[ $\alpha$ -Sulfonpropionsäure]. Fl. (J. pr. [2] 68, 328 C. 1903 [2] 1171).

- $C_{16}H_{22}O_9N_2$  C 49,8 — H 5,7 — O 37,3 — N 7,2 — M. G. 386.  
1) Nitril d.  $\alpha$ -Pentaacetylglukosaminsäure. Sm. 118—119° (B. 35, 4017 C. 1903 [1] 391).
- $C_{16}H_{28}O_2N$  7) Phenylamidoformiat d. 2-Oxy-1-Methyl-3-Isopropyl-R-Pentamethylen. Sm. 82° (B. 37, 237 C. 1904 [1] 726).  
8) Phenylamidoformiat d. 2-Oxy-1,1,4-Trimethylhexahydrobenzol. Sm. 84—85° (u. 92°) (A. 329, 88 C. 1903 [2] 1071).  
9) Phenylamidoformiat d. Dihydropulegenol. Sm. 81—82° (A. 327, 135 C. 1903 [1] 1412).
- $C_{16}H_{29}O_4N_8$  C 59,8 — H 7,2 — O 19,9 — N 13,1 — M. G. 321.  
1) Semicarbazon d. Santonsäure. Sm. 183—185° (G. 33 [1] 198 C. 1903 [2] 45).
- $C_{16}H_{24}O_2S_2$  2) Diisoamyläther d. 2,5-Dimerkapto-1,4-Benzochinon. Sm. 170 bis 172° (A. 336, 156 C. 1904 [2] 1300).
- $C_{16}H_{24}O_4N_2$  4) Di[Diäthylamidoformiat] d. 1,3-Dioxybenzol. Sd. 236—237°<sub>10</sub> (Bl. [3] 31, 691 C. 1904 [2] 198).
- $C_{16}H_{24}O_5S_2$  1)  $\epsilon$ -Keto- $\alpha$ - $\gamma$ -Diäthylsulfon- $\alpha$ -Phenylhexan (B. 37, 509 C. 1904 [1] 884).  
 $C_{16}H_{24}O_8N_8$  2) N-Anhydrid d. Hepta[Amidoacetyl]amidoessigsäure (Oktoglycyl) (B. 37, 1300 C. 1904 [1] 1337).
- $C_{16}H_{25}O_2N$  \*4) norm. Nonylester d. Phenylamidoameisensäure. Sm. 59° (C. r. 138, 149 C. 1904 [1] 577).  
5) Phenylamidoformiat d.  $\alpha$ -Oxynonan. Sm. 59° (Bl. [3] 31, 674 C. 1904 [2] 184).
- $C_{16}H_{25}O_8N$  2) Verbindung (aus Cyancampher u. Epichlorhydrin). Sm. 128—129° (Bl. [3] 31, 371 C. 1904 [1] 1263).
- $C_{16}H_{25}O_8Cl$  1) Isoamylester d. Chloreampnocarbonsäure. Sd. 182—183°<sub>12</sub> (B. 35, 4117 C. 1903 [1] 82).
- $C_{16}H_{25}O_8Br$  2) Isoamylester d. o-Bromcamphocarbonsäure. Sd. 193,5—194,5°<sub>13</sub> (B. 36, 1723 C. 1903 [2] 37).
- $C_{16}H_{25}O_8J$  2) Isoamylester d. o-Jodcamphocarbonsäure. Fl. (B. 36, 1724 C. 1903 [2] 37).
- $C_{16}H_{25}O_4Cl$  \*1) Aethylester d.  $\alpha$ -Chlortetrahydrocarvonylacetessigsäure. Fl. Na (B. 36, 236 C. 1903 [1] 515).  
\*2) Aethylester d.  $\beta$ -Chlortetrahydrocarvonylacetessigsäure. Sm. 146° (B. 36, 235 C. 1903 [1] 514).
- $C_{16}H_{26}O_6N$  6) Triäthylester d.  $\gamma$ -Cyan- $\beta$ -Methylpentan- $\beta\gamma\delta$ -Tricarbonsäure. Sd. 210°<sub>20</sub> (C. 1903 [1] 923; Soc. 85, 134 C. 1904 [1] 727).
- $C_{16}H_{26}O_8N_8$  C 59,6 — H 6,5 — O 33,1 — N 10,8 — M. G. 387.  
1) Diisoamyläther d. 3,5-Dinitro-2,2-Dioxychinolnitrolsäure? Na (Am. 29, 111 C. 1903 [1] 708).
- $C_{16}H_{26}O_2S_2$  1) 2,5-Diisoamyläther d. 2,5-Dimerkapto-1,4-Dioxybenzol. Sm. 68 bis 70° (A. 336, 157 C. 1904 [2] 1300).
- $C_{16}H_{26}O_8S$  2) 2-Heptyl-1,3,5-Trimethylbenzol-4-Sulfonsäure. Mg (B. 37, 1721 C. 1904 [1] 1489).
- $C_{16}H_{26}O_6N_8$  C 40,5 — H 5,5 — O 30,4 — N 23,6 — M. G. 474.  
1) Hepta[Amidoacetyl]amidoessigsäure. HCl (B. 37, 1300 C. 1904 [1] 1337).
- $C_{16}H_{26}O_{11}Hg_4$  1) Verbindung (aus Methyläthylketon u. Mercuriacetat).  $\frac{1}{2}$  Pikrat (B. 36, 3704 C. 1903 [2] 1239).
- $C_{16}H_{28}NJ$  1) Jodmethylat d. d-2-Propyl-1-Benzylhexahydropyridin (J. d. N-Benzyleonin). Sm. 187° (B. 37, 3636 C. 1904 [2] 1510).  
2) isom. Jodmethylat d. d-2-Propyl-1-Benzylhexahydropyridin. Sm. 215° (B. 37, 3636 C. 1904 [2] 1510).
- $C_{16}H_{27}O_8N_7$  C 43,1 — H 6,1 — O 28,8 — N 22,0 — M. G. 445.  
1) Aethylester d. Hexa[Amidoacetyl]amidoessigsäure. Zers. bei 187—190° (C. 1903 [2] 344).
- $C_{16}H_{28}ON_2$  C 72,7 — H 10,6 — O 6,1 — N 10,6 — M. G. 264.  
1) Piperidid d. Bornylamidoameisensäure. Sm. 153° (Soc. 85, 1190 C. 1904 [2] 1125).
- $C_{16}H_{28}O_2S_2$  1) Diisoamyläther d. 2,5-Dimerkapto-1,4-Diketo-hexahydrobenzol. Sm. 150—152° (A. 336, 156 C. 1904 [2] 1300).
- $C_{16}H_{20}O_2N$  3) Bornylester d. Diäthylamidoessigsäure. Sd. 160°<sub>20</sub>. Citrat (Ar. 240, 650 C. 1903 [1] 399).

- $C_{16}H_{29}N_2J$  \*1) Jodmethylat d. Spartein. Sm. bei  $240^\circ$  ( $234^\circ$ ). HJ (Bl. [3] 29, 1140 C. 1904 [1] 293; Ar. 242, 515 C. 1904 [2] 1412).  
 2) Jodisoamylat d. s-Isoamylphenylhydrazin (C. r. 137, 330 C. 1903 [2] 716; Bl. [3] 29, 974 C. 1903 [2] 1115).  
 $C_{16}H_{30}O_5N_4$  C 53,6 — H 8,4 — O 22,3 — N 15,6 — M. G. 358.  
 1) i- $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amidoisocapronylamidoacetylamidoessigsäure (i-Dileucylglycylglycin). Sm.  $250^\circ$  u. Zers. (B. 37, 2506 C. 1904 [2] 426).  
 $C_{16}H_{31}O_2N$  C 71,4 — H 11,5 — O 11,9 — N 5,2 — M. G. 269.  
 1) Menthylester d. Diäthylamidoessigsäure. Sd.  $160-162^\circ_{10}$ . HCl (Ar. 240, 646 C. 1903 [1] 399).  
 $C_{16}H_{31}O_2Cl$  1)  $\beta$ -Chloräthylester d. Myristinsäure. Sm.  $34^\circ$ ; Sd.  $115^\circ$  (B. 36, 4341 C. 1904 [1] 433).  
 $C_{16}H_{31}O_2Br$  2)  $\beta$ -Bromäthylester d. Myristinsäure. Sm.  $48^\circ$ ; Sd.  $134^\circ$  (B. 36, 4341 C. 1904 [1] 433).  
 $C_{16}H_{32}OS$  1) Thiopalmitinsäure. Sm.  $71^\circ$  (C. r. 136, 555 C. 1903 [1] 816).

## — 16 IV —

- $C_{16}H_8O_2N_2Cl_2$  3) isom. Dichlorindigo (D.R.P. 139838 C. 1903 [1] 748).  
 4) isom. Dichlorindigo (B. 37, 1866 C. 1904 [1] 1600).  
 $C_{16}H_8O_2N_2Br_2$  \*1) m-Dibromindigo (D.R.P. 149940 C. 1904 [1] 1046).  
 4) isom. Dibromindigo (B. 37, 1868 C. 1904 [1] 1601).  
 $C_{16}H_8ON_2Br_3$  1) 1-[2,4,6-Tribromphenyl]azo-2-Oxynaphtalin. Sm.  $169^\circ$  (B. 36, 2073 C. 1903 [2] 358).  
 $C_{16}H_8O_2N_2Cl$  \*1) Chlorindigo (D.R.P. 139838 C. 1903 [1] 748).  
 $C_{16}H_8O_2N_2Br$  \*2) Bromindigo (D.R.P. 144249 C. 1903 [2] 779; D.R.P. 149899, 149940, 149983 C. 1904 [1] 1046).  
 $C_{16}H_8O_2N_2Br_3$  1) 2-Oxy-1-[2,4,6-Tribromphenylazo]naphtalin. Sm.  $173-174^\circ$  (Soc. 83, 808 C. 1903 [2] 195, 426).  
 $C_{16}H_8O_4N_3Cl_2$  1) p-Dichlor-1-[2,4-Dinitrophenyl]amidonaphtalin. Sm.  $179^\circ$  (B. 36, 3270 C. 1903 [2] 1127).  
 $C_{16}H_{10}ON_2Cl_2$  2) 2-Oxy-1-[2,4-Dichlorphenylazo]naphtalin. Sm.  $190^\circ$  (Soc. 83, 813 C. 1903 [2] 426).  
 $C_{16}H_{10}ON_3Cl$  2) Acetyl- $\alpha$ -Chlorindophenazin. Sm.  $208-209^\circ$  (B. 35, 4332 C. 1903 [1] 292).  
 $C_{16}H_{10}O_2N_2Br_2$  1) 2-Oxy-1-[4,6-Dibrom-2-Oxyphenylazo]naphtalin. Sm.  $214-215^\circ$  (Soc. 83, 804 C. 1903 [2] 195, 425).  
 $C_{16}H_{10}O_5N_2S_2$  1) 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[2-Nitrobenzyliden]tetrahydrothiazol. Sm.  $238^\circ$  (M. 24, 512 C. 1903 [2] 837).  
 2) 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[3-Nitrobenzyliden]tetrahydrothiazol. Sm.  $240^\circ$  (M. 25, 160 C. 1904 [1] 894).  
 3) 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[4-Nitrobenzyliden]tetrahydrothiazol. Sm.  $240^\circ$  (M. 25, 162 C. 1904 [1] 894).  
 $C_{16}H_{10}O_4N_3Cl$  1) p-Chlor-2-[2,4-Dinitrophenyl]amidonaphtalin. Sm.  $206^\circ$  (B. 36, 3270 C. 1903 [2] 1127).  
 $C_{16}H_{10}O_5N_2S_2$  \*1) Indigo-3,3'-Disulfonsäure (M. 24, 14 C. 1903 [1] 776).  
 4) isom. Indigodisulfonsäure (D.R.P. 143141 C. 1903 [2] 272).  
 $C_{16}H_{10}O_{11}N_2S$  1) p-Dinitro-2,6-Dioxy-9,10-Anthrachinon-2,6-Dimethyläther-p-Sulfonsäure (D.R.P. 143858 C. 1903 [2] 404).  
 2) p-Dinitro-2,7-Dioxy-9,10-Anthrachinon-2,7-Dimethyläther-p-Sulfonsäure (D.R.P. 143858 C. 1903 [2] 404).  
 $C_{16}H_{10}O_{16}N_2S_2$  1) p-Dinitro-1,3,5,7-Tetraoxy-9,10-Anthrachinondimethyläther-p-Disulfonsäure (D.R.P. 139425 C. 1903 [1] 746).  
 $C_{16}H_{11}ONS_2$  1) 2-Thiocarbonyl-4-Keto-3-Phenyl-4-Benzylidentetrahydrothiazol. Sm.  $186^\circ$  (M. 24, 505 C. 1903 [2] 836).  
 $C_{16}H_{11}O_2NS_2$  1) 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-Phenyltetrahydrothiazol. Sm.  $172^\circ$  (M. 25, 165 C. 1904 [1] 894).  
 $C_{16}H_{11}O_2N_2Cl$  4) 2-Oxy-1-[4-Chlor-2-Oxyphenylazo]naphtalin. Sm.  $265^\circ$  (Soc. 83, 813 C. 1903 [2] 426).  
 $C_{16}H_{11}O_2N_4Br$  1) 4-Brom-2-[2-Nitrophenyl]azo-1-Amidonaphtalin. Sm.  $219-220^\circ$  (Soc. 85, 752 C. 1904 [2] 448).  
 2) 4-Brom-2-[3-Nitrophenyl]azo-1-Amidonaphtalin. Sm.  $246^\circ$  (Soc. 85, 752 C. 1904 [2] 448).

- $C_{16}H_{11}O_2N_4Br$  3) 4-Brom-2-[4-Nitrophenyl]azo-1-Amidonaphtalin. Sm. 201—202° (*Soc.* 85, 751 *C.* 1904 [2] 448).
- $C_{16}H_{11}O_3NCl_2$  2) *p*-Dichlordimethylamidooxy-9,10-Anthrachinon. Sm. 185° (*Bl.* [3] 29, 62 *C.* 1903 [1] 456).
- $C_{16}H_{11}O_3N_3S$  2) 2-Phenylimido-4-Keto-5-[3-Nitrobenzyliden]tetrahydrothiazol. Sm. noch nicht bei 290° (*C.* 1903 [1] 1258).
- $C_{16}H_{11}O_4N_2Br$  1) *p*-Brom-8-Nitro-1-Dimethylamido-9,10-Anthrachinon. Sm. 198° (*D.R.P.* 146691 *C.* 1903 [2] 1352).
- $C_{16}H_{11}O_4N_4Cl$  1) 1-Amido-2-[5-Chlor-2,4-Dinitrophenyl]amidonaphtalin. Sm. 232° (*B.* 37, 3888 *C.* 1904 [2] 1654).
- $C_{16}H_{11}O_{15}N_7S$  2) *O*-Isopropyläther-S-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenylimidomerkaptooxymethan. Sm. 147° (*Soc.* 85, 648 *C.* 1904 [2] 310).
- $C_{16}H_{11}ClBrJ$  1) 3-Bromphenyl-1-Naphtyljodoniumchlorid. Sm. 159°. +  $HgCl_2$ , 2 +  $PtCl_4$  (*J. pr.* [2] 69, 332 *C.* 1904 [2] 36).
- $C_{16}H_{12}ONCl$  \*2) Methyläther d. 4-Chlor-1-Oxy-3-Phenylisochinolin. Sm. 76° (*B.* 37, 1686 *C.* 1904 [1] 1523).
- 6) Methyläther d. 1-Chlor-4-Oxy-3-Phenylisochinolin. Sm. 103,5° (*B.* 37, 1690 *C.* 1904 [1] 1524).
- 7) Nitril d.  $\beta$ -Keto- $\gamma$ -[4-Chlorphenyl]- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure. Sm. 127° (*J. pr.* [2] 67, 390 *C.* 1903 [1] 1357).
- $C_{16}H_{12}ON_2S$  \*1) 2-Phenylimido-4-Keto-5-Benzylidentetrahydrothiazol. Sm. 251 bis 252°. Ag, +  $C_2H_5ONa$  (*C.* 1903 [1] 1257).
- $C_{16}H_{12}OBrJ$  1) 3-Bromphenyl-1-Naphtyljodoniumhydroxyd. Salze siehe (*J. pr.* [2] 69, 332 *C.* 1904 [2] 36).
- $C_{16}H_{12}O_2NCl$  \*3) 4-Chlor-1-Dimethylamido-9,10-Anthrachinon. Sm. 172° (*D.R.P.* 146691 *C.* 1903 [2] 1353).
- $C_{16}H_{12}O_2NBr$  1) 4-Brom-1-Dimethylamido-9,10-Anthrachinon. Sm. 178° (*D.R.P.* 146691 *C.* 1903 [2] 1352).
- $C_{16}H_{12}O_4N_2S$  14) 2-Benzoyl-5-Phenylimidazol-1-Sulfonsäure +  $4H_2O$ . Sm. 274° wasserfrei.  $NH_4$  +  $2H_2O$ ,  $PbOH$ , Ag (*B.* 35, 4133 *C.* 1903 [1] 295). — \*III, 93.
- $C_{16}H_{12}O_5N_4S$  3) 1-Phenylazo-2-Phenylimidazol-4[oder 5]-Carbonsäure-1'-Sulfonsäure. Zers. oberh. 200° (*B.* 37, 703 *C.* 1904 [1] 1562).
- $C_{16}H_{12}O_7N_4S_2$  1) 2-[4-Amidophenyl]-8-Oxynaphtriazol-3,6-Disulfonsäure (*D.R.P.* 146375 *C.* 1903 [2] 1402).
- $C_{16}H_{12}N_4Br_2J_2$  1) Hexamethylenamindibromojodid (*C. r.* 136, 1472 *C.* 1903 [2] 297).
- $C_{16}H_{13}ON_2Cl$  2) 4-Chlor-1-[( $\alpha$ -Phenylhydrazonäthyl]benzofuran. Sm. 90—92° (*A.* 312, 334). — \*III, 530.
- 3) Nitril d.  $\beta$ -Oximido- $\gamma$ -Phenyl- $\alpha$ -[4-Chlorphenyl]buttersäure. Sm. 125° (*J. pr.* [2] 67, 391 *C.* 1903 [1] 1357).
- $C_{16}H_{13}ON_2S_2$  1) Phenylbenzylamid d. Isorhodanformylamidodithioameisensäure. Sm. 180° (*Soc.* 83, 95 *C.* 1903 [1] 230, 447).
- $C_{16}H_{13}ON_4Cl$  1) 5-Keto-4-[4-Chlorphenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 141—142° (*Soc.* 83, 1125 *C.* 1903 [2] 24, 791).
- $C_{16}H_{13}ON_4Br$  1) 5-Keto-4-[4-Bromphenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 152—153° (*Soc.* 83, 1124 *C.* 1903 [2] 24, 791).
- $C_{16}H_{13}O_2NCl_2$  1) 3-Chlor-4-Propionylchloramidodiphenylketon. Sm. 114° (*Soc.* 85, 343 *C.* 1904 [1] 1405).
- $C_{16}H_{13}O_3NS$  \*8) 2-Phenylamidonaphtalin-6-Sulfonsäure. Na (*C.* 1904 [1] 1013).
- 10) 2-Phenylamidonaphtalin-8-Sulfonsäure. Na (*C.* 1904 [1] 1013).
- $C_{16}H_{13}O_4NCl_2$  1) Dichlordimethylamidooxydiphenylketon - 2 - Carbonsäure (aus 3-Dimethylamido-1-Oxybenzol u. *p*-Dichlorbenzol-1,2-Dicarbonsäureanhydrid). Sm. 191° (*Bl.* [3] 29, 60 *C.* 1903 [1] 456).
- $C_{16}H_{13}O_4NBr_2$  1) *N*-Acetyl-2-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 201—202° (*A.* 332, 193 *C.* 1904 [2] 210).
- 2) *N*-Acetyl-3-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 211—213° (*A.* 332, 195 *C.* 1904 [2] 210).
- 3) *N*-Acetyl-4-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 221—222° (*A.* 332, 198 *C.* 1904 [2] 210).
- $C_{16}H_{13}O_4NS$  \*1) 6-Phenylamido-1-Oxynaphtalin-3-Sulfonsäure (*C.* 1904 [1] 1013).
- \*2) 7-Phenylamido-1-Oxynaphtalin-3-Sulfonsäure (*C.* 1904 [1] 1013).
- 3) 6-Methylphenylsulfonamido - 1,2 - Benzpyron. Sm. 165—167° (*Soc.* 85, 1238 *C.* 1904 [2] 1124).

- $C_{16}H_{13}O_4NS$  4) 2-[4-Oxyphenyl]amidonaphtalin-6-Sulfonsäure (*C.* 1904 [1] 1013).  
5) 2-[4-Oxyphenyl]amidonaphtalin-8-Sulfonsäure (*C.* 1904 [1] 1013).
- $C_{16}H_{13}O_4N_2Cl_3$  \*3)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[Phenylamido]äthan-2, 2'-Dicarbonsäure. Sm. 165° (*B.* 35, 3898 *C.* 1903 [1] 29).
- $C_{16}H_{13}O_5NS$  \*1) 7-[4-Oxyphenyl]amido-1-Oxynaphtalin-3-Sulfonsäure. Na (*C.* 1904 [1] 1013).  
4)  $\beta$ -Aethylamido-9,10-Anthrachinon-1-Sulfonsäure (D.R.P. 144634 *C.* 1903 [2] 750).
- $C_{16}H_{13}O_6NS$  2) 4-Aethylamido-1-Oxy-9,10-Anthrachinon-7-Sulfonsäure (D.R.P. 155440 *C.* 1904 [2] 1356).
- $C_{16}H_{13}O_6NS_2$  1) 2-Phenylamidonaphtalin-2<sup>3</sup>,6-Disulfonsäure. Na (*C.* 1904 [1] 1013).  
2) 2-Phenylamidonaphtalin-2<sup>4</sup>,6-Disulfonsäure. Na (*C.* 1904 [1] 1013).
- $C_{16}H_{14}ON_2Se$  1) Phenylbenzylamid d. Selencyanessigsäure. Sm. 70° (*Ar.* 241, 218 *C.* 1903 [2] 104).
- $C_{16}H_{14}O_3NCl$  5) 3-Chlor-4-Propionylamidodiphenylketon. Sm. 107,5° (*Soc.* 85, 343 *C.* 1904 [1] 1405).  
6) 2-Propionylchloramidodiphenylketon. Sm. 107° (*C.* 1903 [1] 1137).  
7) 4-Propionylchloramidodiphenylketon. Sm. 129° (*C.* 1903 [1] 1137).  
8) Aethyl-4-Benzoylchloramidophenylketon. Sm. 70° (*C.* 1903 [1] 1223).  
9) 4-Acetylchloramido-3-Methyldiphenylketon. Sm. 110° (*Soc.* 85, 593 *C.* 1904 [1] 1554).  
10) 6-Acetylchloramido-3-Methyldiphenylketon. Sm. 116° (*Soc.* 85, 595 *C.* 1904 [1] 1554).  
11) Gem. Imid d. Phenyllessigsäure d. 4-Chlorphenyllessigsäure. Sm. 172° (*J. pr.* [2] 69, 16 *C.* 1904 [1] 640).
- $C_{16}H_{14}O_2NBr$  1) 2-Propionylbromamidodiphenylketon. Sm. 90° (*C.* 1903 [1] 1137).  
2) 4-Propionylbromamidodiphenylketon. Sm. 123° (*C.* 1903 [1] 1137).  
3) Aethyl-4-Benzoylbromamidophenylketon. Sm. 111° (*C.* 1903 [1] 1223).
- $C_{16}H_{14}O_2N_2Br_2$  4) s-Di[4-Brom-2-Methylphenylamid] d. Oxalsäure. Sm. 254—255° (*M.* 25, 378 *C.* 1904 [2] 320).
- $C_{16}H_{14}O_2ClBr$  1)  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 155° (*B.* 36, 2401 *C.* 1903 [2] 499).  
2) isom.  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 160° (*B.* 36, 2402 *C.* 1903 [2] 499).
- $C_{16}H_{14}O_2ClJ$  1)  $\gamma$ -Chlor- $\gamma$ -Jod- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 133—134° u. Zers. (*B.* 36, 2414 *C.* 1903 [2] 500).
- $C_{16}H_{14}O_3N_2Br_4$  \*1) Diäthyläther d. 3,5,3',5'-Tetrabrom-4,4'-Dioxyazoxybenzol. Sm. 163° (*Am.* 30, 65 *C.* 1903 [2] 355).
- $C_{16}H_{14}O_3N_2S$  \*7) 2-[4-Amidophenyl]amidonaphtalin-6-Sulfonsäure. Na (*C.* 1904 [1] 1013).
- $C_{16}H_{14}O_4NBr$  \*2) Methyläther d. 10-Brom-10-Nitro-9,9-Dioxy-9,10-Dihydroanthracen. Sm. 139° (*A.* 330, 169 *C.* 1904 [1] 891).
- $C_{16}H_{14}O_4N_2Br_2$  1) N-Acetyl-4-Nitro-2-Methylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 161—162° (*A.* 332, 191 *C.* 1904 [2] 210).  
2) N-Acetyl-3-Nitro-4-Methylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 179—180,5° (*A.* 332, 192 *C.* 1904 [2] 210).
- $C_{16}H_{14}O_6N_2S_2$  2) 6-[3-Amidophenylsulfon]amido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 151017 *C.* 1904 [1] 382).  
3) 6-[3-Amidophenylsulfon]amido-2-Oxynaphtalin-4-Sulfonsäure (D.R.P. 151017 *C.* 1904 [1] 1382).
- $C_{16}H_{14}O_8N_2S_2$  2) 1,5-Di[Sulfomethylamido]-9,10-Anthrachinon (D.R.P. 112115 *C.* 1900 [2] 651). — \*III, 297.
- $C_{16}H_{14}O_{12}N_2S_2$  1)  $\beta$ -Diamido-1,3,5,7-Tetraoxy-9,10-Anthrachinondimethyläther- $\beta$ -Disulfonsäure (D.R.P. 146265 *C.* 1903 [2] 1227).
- $C_{16}H_{15}ONBr_2$  2) 1-[3,5-Dibrom-2-Oxybenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 113—114° (*A.* 332, 224 *C.* 1904 [2] 203).
- $C_{16}H_{15}ONS_2$  \*1) 1,2-Diphenyl-3-Aethylimidoxanthid. Sm. 97° (*C.* 1904 [1] 1003).
- $C_{16}H_{15}O_2NBr_2$  4) N-Acetyl-2-Methylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 115° (*A.* 332, 186 *C.* 1904 [2] 210).

- $C_{16}H_{15}O_2NBr_2$  5) Acetat d. Methylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 91° (A. 332, 225 C. 1904 [2] 203).
- $C_{16}H_{15}O_2N_2Cl$  4) Äthyläther d. Benzoylimido-3-Chlorphenylamidooxymethan. Sm. 47—48° (Am. 32, 366 C. 1904 [2] 1507).
- $C_{16}H_{15}O_2N_2Br$  2) s-2-Methylphenylamid-4-Brom-2-Methylphenylamid d. Oxalsäure. Sm. 186° (M. 25, 380 C. 1904 [2] 320).
- $C_{16}H_{15}O_2N_4Br$  1) 8-Brom-5-[2-Nitrophenylazo]amido-1,2,3,4-Tetrahydronaphtalin. Zers. 170—175° (Soc. 85, 749 C. 1904 [2] 448).  
2) 8-Brom-5-[3-Nitrophenylazo]amido-1,2,3,4-Tetrahydronaphtalin. Zers. bei 165—166° (Soc. 85, 749 C. 1904 [2] 448).  
3) 8-Brom-5-[4-Nitrophenylazo]amido-1,2,3,4-Tetrahydronaphtalin. Zers. bei 178° (Soc. 85, 749 C. 1904 [2] 448).
- $C_{16}H_{15}O_3NCl_2$  1) p-Dichlordimethylamidooxydiphenylmethan-2-Carbonsäure. Sm. 195° (B. [3] 29, 62 C. 1903 [1] 456).
- $C_{16}H_{15}O_3NBr_2$  4) N-Acetyl-2-Methoxyphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 102—103° (A. 332, 192 C. 1904 [2] 210).  
5) N-Acetyl-4-Methoxyphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 114—115° (A. 332, 193 C. 1904 [2] 210).
- $C_{16}H_{15}O_4N_2J$  1) Diacetat d. 4-Jodosoazobenzol. Sm. 164° (B. 37, 1312 C. 1904 [1] 1341).
- $C_{16}H_{15}N_2BrS_2$  1) Äthyläther d. 2-Brom-5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 185—187° u. Zers. + J<sub>2</sub> (J. pr. [2] 67, 239 C. 1903 [1] 1263).
- $C_{16}H_{15}N_2JS_2$  1) Methyläther d. 2-Jod-5-Merkapto-2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 188° (J. pr. [2] 67, 259 C. 1903 [1] 1265).  
2) Äthyläther d. 2-Jod-5-Merkapto-1,2-Diphenyl-1,2-Dihydro-1,3,4-Triazol. Sm. 193—194° u. Zers. + J<sub>2</sub> (J. pr. [2] 67, 241 C. 1903 [1] 1263).
- $C_{16}H_{16}ONCl$  2) 2-Benzoylamido-1-[γ-Chlorpropyl]benzol. Sm. 108° (B. 37, 2021 C. 1904 [2] 1238).
- $C_{16}H_{16}ONBr_3$  2) α-[4-Dimethylamidophenyl]-α-[2,3,5-Tribrom-4-Oxyphenyl]-äthan. Sm. 108°. HBr, HJ (A. 334, 333 C. 1904 [2] 989).
- $C_{16}H_{16}ON_2Br_2$  1) Phenylamid d. p-Dibrom-p-Phenylamidoisobuttersäure. Sm. 152° (B. 36, 1271 C. 1903 [1] 1219).
- $C_{10}H_{16}ON_2S$  12) Methyläther d. α-Benzoylimido-α-Methylphenylamido-α-Merkaptomethan. Sm. 113° (Am. 29, 81 C. 1903 [1] 523).  
13) 6-Äthyläther d. 2-Merkapto-6-Oxy-4-Methyl-1-Phenylbenzimidazol. Sm. 244—245° (B. 36, 3853 C. 1904 [1] 90).  
14) 6-Äthyläther d. 2-Merkapto-6-Oxy-1-[4-Methylphenyl]benzimidazol. Sm. 205—206° (B. 36, 3851 C. 1904 [1] 89).
- $C_{16}H_{16}ON_2S_2$  \*3) Monoäthyläther d. α-Dimerkapto-methylen-β-Benzoyl-β-Phenylhydrazin. Sm. 164—165° (J. pr. [2] 67, 242 C. 1903 [1] 1263).  
5) Dimethyläther d. 5-Merkapto-2-Oxy-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 82° (J. pr. [2] 67, 225 C. 1903 [1] 1261).  
6) Methyläther d. Benzoyl-4-Methylphenylamidodithioameisensäure. Sm. 160° (J. pr. [2] 67, 259 C. 1903 [1] 1266).
- $C_{16}H_{16}O_2N_2S$  \*6) Äthylester d. Diphenylthioallophansäure. Sm. 95° (Soc. 83, 557 C. 1903 [1] 1123).
- $C_{16}H_{16}O_2N_2S_3$  2) Amid d. Dibenzyltrisulfid-αα'-Dicarbonsäure + H<sub>2</sub>O. Sm. 217° (C. 1903 [2] 1272).
- $C_{16}H_{16}O_2N_2Se$  1) Phenylbenzylamid d. Carbaminselenessigsäure. Sm. 140—141° u. Zers. (Ar. 241, 219 C. 1903 [2] 104).
- $C_{16}H_{16}O_2N_2Se_2$  1) Di[Phenylamid] d. Dimethyldiselenid-αα'-Dicarbonsäure (Diselenglykolsäureanilid). Sm. 158° (Ar. 241, 201 C. 1903 [2] 103).
- $C_{16}H_{16}O_4N_4Br_2$  1) Dibromricinin ( $C_{16}H_{14}O_4N_4Br_2$ ). Sm. 247° (C. 1895 [1] 853). — \*III, 690.
- $C_{16}H_{16}O_5N_4S$  1) 5-[4-Nitrophenylazo]amido-1,2,3,4-Tetrahydronaphtalin-8-Sulfonsäure (Soc. 85, 758 C. 1904 [2] 449).
- $C_{16}H_{16}O_5N_2S_2$  1) 4,4'-Di[Acetyl-amido]biphenyl-2,2'-Disulfonsäure. N<sub>H2</sub> (J. pr. [2] 66, 572 C. 1903 [1] 520).
- $C_{16}H_{16}N_3JS$  1) Methyläther d. 5-Jod-3-Merkapto-5-Methyl-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 250° (J. pr. [2] 67, 255 C. 1903 [1] 1265).

- $C_{16}H_{17}ONBr_2$  2) Methyläther d. Phenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 115—116° (A. 334, 303 C. 1904 [2] 985).
- $C_{16}H_{17}ONS$  8) 4-Acetylamido-3,4'-Dimethyldiphenylsulfid. Sm. 135—136° (J. pr. [2] 68, 282 C. 1903 [2] 994).
- $C_{16}H_{17}ON_2S_2$  1) Dimethyläther d.  $\alpha$ -Dimerkaptomethylenamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 105° (B. 36, 1365 C. 1903 [1] 1341).  
2) Methylester d.  $\alpha$ -Phenylamidoformyl- $\alpha$ -[2-Methylphenyl]-hydrazin- $\beta$ -Dithiocarbonsäure. Sm. 152° (B. 36, 1370 C. 1903 [1] 1342; B. 36, 1372 C. 1903 [1] 1343).
- $C_{16}H_{17}O_2NS$  3) Äthylester d. 4-Merkaptophenylamidoameisen-4-Methylphenyläthersäure (p-Thiotolylphenylurethan). Sm. 94° (J. pr. [2] 68, 269 C. 1903 [2] 993).  
4) Phenylamid d. 1,2,3,4-Tetrahydronaphtalin-5-Sulfonsäure. Sm. 144—145° (Soc. 85, 757 C. 1904 [2] 449).
- $C_{16}H_{17}O_3N_2S$  \*1) 5-Amido-8-Phenylazo-1,2,3,4-Tetrahydronaphtalin-8'-Sulfonsäure (Soc. 85, 754 C. 1904 [2] 448).
- $C_{16}H_{17}O_3N_2S$  1) Dimethyläther d. Nitrosodi[2-Oxyphenyl]thiodicyandiamin. Sm. 171—172° (B. 36, 3324 C. 1903 [2] 1169).
- $C_{16}H_{17}O_4NS$  2) Methylester d. 2-[Methyl-4-Methylphenylsulfon]amidobenzol-1-Carbonsäure. Sm. 94° (B. 35, 4274 C. 1903 [1] 332).
- $C_{16}H_{18}ON_2S$  3) Äthyläther d. 4'-Oxy-4-Methyl-s-Diphenylthioharnstoff. Sm. 134—135° (B. 36, 3351 C. 1904 [1] 90).
- $C_{16}H_{18}O_2NBr_3$  1) Methylhydroxyd d. 2,3,5-Tribrom-4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 210—212° (A. 334, 332 C. 1904 [2] 988).
- $C_{16}H_{18}O_2N_4S$  4) Dimethyläther d. Di[2-Oxyphenyl]thiodicyandiamin. Sm. 80—82°. HCl, HNO<sub>3</sub>, Pikrat (B. 36, 3323 C. 1903 [2] 1169).
- $C_{16}H_{18}O_3N_2S$  1) Äthylester d. 2-Naphtylsulfonamidoacetylamidoessigsäure ( $\beta$ -Naphtalinsulfoglycylglycinäthylester). Sm. 119—120° (B. 36, 2105 C. 1903 [1] 1304).
- $C_{16}H_{18}O_6N_2S_2$  \*1) 2,4,2',4'-Tetramethylazobenzol-5,5'-Disulfonsäure + 5H<sub>2</sub>O. Na<sub>2</sub> + H<sub>2</sub>O, Ca + H<sub>2</sub>O, CaH + 1½H<sub>2</sub>O, Ba, BaH + H<sub>2</sub>O (A. 330, 46 C. 1904 [1] 1141).
- $C_{16}H_{18}N_4ClBr$  1) Brommethylat d. Verb. C<sub>15</sub>H<sub>15</sub>N<sub>4</sub>Cl. HBr + H<sub>2</sub>O (B. 37, 558 C. 1904 [1] 893).
- $C_{16}H_{19}ON_4Cl$  1) Base (aus 4-Chlor-1,2-Di[Methylamido]benzol). Chlorid, Bromid, Pikrat (B. 37, 557 C. 1904 [1] 893).
- $C_{16}H_{19}O_5NS$  1) 4-Amidobenzol-1-Carbonsäureäthylester + 1-Methylbenzol-4-Sulfonsäure. Sm. 185—187° (D.R.P. 150070 C. 1904 [1] 975).
- $C_{16}H_{19}O_6NS$  1) 1-Oxybenzylmethyläther-4-Sulfonsäure + 4-Amidobenzol-1-Carbonsäureäthylester. Sm. 188° (D.R.P. 149345 C. 1904 [1] 846).
- $C_{16}H_{19}O_7NS$  1) 1,2-Dioxybenzol-1-Methyläther-3-Sulfonsäure + 4-Amidobenzol-1-Carbonsäureäthylester. Sm. 175° (D.R.P. 149345 C. 1904 [1] 846).
- $C_{16}H_{20}ONP$  1) Diäthylamid d. Diphenylphosphinsäure. Sm. 138° (A. 326, 183 C. 1903 [1] 819).
- $C_{16}H_{20}O_3NP$  2) Diäthylmonamid d. Phosphorsäurediphenylester. Fl. (A. 326, 183 C. 1903 [1] 819).
- $C_{16}H_{20}O_3N_2S$  1) 4-Amido-4'-Sulfomethylamido-2,2'-Dimethyldiphenylmethan. Sm. 178—180° (D.R.P. 148760 C. 1904 [1] 555).  
2) 4-Amido-4'-Sulfomethylamido-3,3'-Dimethyldiphenylmethan. Sm. 172° (D.R.P. 148760 C. 1904 [1] 555).  
3) 6-Amido-6'-Sulfomethylamido-3,3'-Dimethyldiphenylmethan. Sm. 159—160° (D.R.P. 148760 C. 1904 [1] 555).  
4) 4,4'-Di[Dimethylamido]biphenyl-3-Sulfonsäure. Sm. 261,5° u. Zers. (B. 37, 3770 C. 1904 [2] 1547).
- $C_{16}H_{20}O_6N_2S_2$  1) 2'-Amido-2,4,3',5'-Tetramethyldiphenylamin-5,6'-Disulfonsäure + H<sub>2</sub>O (A. 330, 58 C. 1904 [1] 1142).
- $C_{16}H_{20}O_7N_2S$  1) 2-Naphtylsulfonhydrazon d. d-Glykose (C. 1904 [2] 1494).
- $C_{16}H_{21}ON_2Cl$  1) Verbindung + 2H<sub>2</sub>O (aus 4,4'-Tetramethyldiamidobiphenyl) (B. 37, 3766 C. 1904 [2] 1546).
- $C_{16}H_{21}ON_2J$  \*1) Jodäthylat d. 4-Dimethylamido-4'-Oxydiphenylamin. Sm. 207° (J. pr. [2] 69, 166 C. 1904 [1] 1268).  
2) Jodäthylat d. 4-Dimethylamido-3'-Oxydiphenylamin. Sm. 180° (J. pr. [2] 69, 237 C. 1904 [1] 1269).

- $C_{16}H_{21}ON_2J_3$  1) Verbindung (aus d. Verb.  $C_{16}H_{20}N_2J_4$ ) (B. 37, 3770 C. 1904 [2] 1547).
- $C_{16}H_{21}O_2N_3P$  1) Di[2-Methylphenylamid] d. Phosphorsäuremonoäthylester. Sm. 115° (A. 326, 250 C. 1903 [1] 868).
- $C_{16}H_{21}O_3NS$  2) Phenylsulfon- $\alpha$ -Anhydripulegonhydroxylamin. Sm. 120° (B. 37, 954 C. 1904 [1] 1087).
- $C_{16}H_{21}O_3N_3S$  1) Methylester d. 2-Thiocarbonyl-4-Keto-5-Dimethyl-3-Phenyltetrahydroimidazol-1- $\alpha$ -Amidoisobuttersäure. Sm. 142° u. Zers. (C. 1904 [2] 1028).
- $C_{16}H_{22}ON_3P$  1) Diäthylmonamid-Di[Phenylamid] d. Phosphorsäure. Sm. 150° (A. 326, 184 C. 1903 [1] 820).
- 2) Isobutylamid-Di[Phenylamid] d. Phosphorsäure. Sm. 207° (A. 326, 174 C. 1903 [1] 819).
- $C_{16}H_{22}N_3SP$  1) Aethylmonamid-Di[4-Methylphenylamid] d. Thiophosphorsäure. Sm. 140° (A. 326, 203 C. 1903 [1] 821).
- 2) Diäthylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 192° (A. 326, 212 C. 1903 [1] 822).
- 3) Isobutylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 118° (A. 326, 204 C. 1903 [1] 821).
- $C_{16}H_{24}ONCl$  1) Nitrosochlorid d.  $\alpha$ -[2,4,6-Trimethylphenyl]- $\alpha$ -Hepten. Sm. 160° u. Zers. (B. 37, 931 C. 1904 [1] 1209).
- $C_{16}H_{24}ON_5P$  1) Diäthylmonamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 184—185° (A. 326, 184 C. 1903 [1] 820).
- 2) Isobutylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 141° (A. 326, 174 C. 1903 [1] 819).
- $C_{16}H_{24}N_5SP$  1) Diäthylmonamid-Di[Phenylhydrazid] d. Thiophosphorsäure. Sm. 129° (A. 326, 205 C. 1903 [1] 821).
- 2) Isobutylmonamid-Di[Phenylhydrazid] d. Thiophosphorsäure. Sm. 129° (A. 326, 205 C. 1903 [1] 821).
- $C_{16}H_{25}O_2N_2P$  1) 1,1'-Dipiperidid d. Phosphorsäuremonophenylester. Sd. 215 bis 216°<sub>10</sub> (A. 326, 197 C. 1903 [1] 821). — \*IV, 10.
- $C_{16}H_{26}ON_3P$  1) Phenylamid-1,1'-Dipiperidid d. Phosphorsäure. Sm. 159° (A. 326, 197 C. 1903 [1] 821). — \*IV, 10.
- $C_{16}H_{26}N_3SP$  1) Phenylmonamid-1,1'-Dipiperidid d. Thiophosphorsäure. Sm. 112° (A. 326, 217 C. 1903 [1] 822). — \*IV, 10.
- $C_{16}H_{27}ON_4Cl$  \*1) Chlormethylat d. d-Lupanin. (HCl, PtCl<sub>4</sub>) + AuCl<sub>3</sub> (Ar. 242, 435 C. 1904 [2] 783).
- $C_{16}H_{27}ON_4J$  \*1) Jodmethylat d. d-Lupanin. Sm. 238,5—240° (Ar. 242, 435 C. 1904 [2] 783).
- $C_{16}H_{27}ON_4P$  1) Phenylhydrazid-1,1'-Dipiperidid d. Phosphorsäure. Sm. 155° (A. 326, 197 C. 1903 [1] 821).
- $C_{16}H_{27}O_2N_2Cl$  1) Chlormethylat d. Oxylupanin. + (HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), + AuCl<sub>3</sub> (Ar. 242, 429 C. 1904 [2] 782).
- $C_{16}H_{27}O_2N_2J$  1) Jodmethylat d. Oxylupanin. Sm. 228,5—230,5° (Ar. 242, 429 C. 1904 [2] 782).
- $C_{16}H_{28}O_5N_3Br$  1)  $\alpha$ -[ $\alpha$ -Bromisocapronyl]amidoisocapronylamidoacetylamidoessigsäure ( $\alpha$ -Bromisocapronylleucylglycylglycin). Sm. 161—162° (B. 37, 2505 C. 1904 [2] 426).

- $C_{16}H_{11}O_4N_3Cl_2S$  1) 8-Amido-7-[2,4-Dichlorphenyl]azo-1-Oxynaphtalin-4-Sulfonsäure (C. 1903 [1] 676).
- $C_{16}H_{11}O_6N_3ClS$  1) 1-[4-Chlor-3-Nitrophenyl]azo-2-Oxynaphtalin-1°-Sulfonsäure (D.R.P. 132968 C. 1903 [2] 315; D.R.P. 145911 C. 1903 [2] 1153).
- $C_{16}H_{12}O_2NClS$  1) 1-Chlor-2-Naphtylamid d. Benzolsulfonsäure. Sm. 130 bis 131°. Na + 5C<sub>2</sub>H<sub>5</sub>O (C. 1904 [1] 1075; Soc. 85, 378 C. 1904 [1] 1412).
- $C_{16}H_{12}O_3N_3BrS$  1) 4-Brom-2-Phenylazo-1-Amidonaphtalin-2°-Sulfonsäure (Soc. 85, 752 C. 1904 [2] 448).
- $C_{16}H_{12}O_5NBrS$  1) p-Brom-1-Dimethylamido-9,10-Anthrachinon-4-Sulfonsäure (D.R.P. 146691 C. 1903 [2] 1352).

- $C_{16}H_{18}ON_4S_3P$  1) Phosphoryltrithiocyanat + Phenylbenzylamin. Sm. 137 bis 138° (*Soe.* 85, 368 *C.* 1904 [1] 1407).
- $C_{16}H_{14}O_2N_2Cl_2Se_2$  1) Di[3-Chlorphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 183° (*Ar.* 241, 209 *C.* 1903 [2] 104).
- $C_{16}H_{14}O_2N_2Br_2Se_2$  1) Di[3-Bromphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 198° (*Ar.* 241, 213 *C.* 1903 [2] 104).
- $C_{16}H_{16}ON_2BrS_2$  1) Aethylester d.  $\beta$ -Brom- $\alpha$ -Benzoyl- $\alpha$ -Phenylhydrazin- $\beta$ -Dithiocarbonsäure. Sm. 117° (*J. pr.* [2] 67, 240 *C.* 1903 [1] 1263).
- $C_{16}H_{16}ONBr_4J$  1) Jodmethylat d. 3,4,5,6-Tetrabrom-4'-Dimethylamido-2-Oxydiphenylmethan. Sm. 165—166° (*A.* 334, 328 *C.* 1904 [2] 988).
- $C_{16}H_{17}ONBr_3J$  1) Jodmethylat d. 2,3,5-Tribrom-4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 171—173° (*A.* 334, 332 *C.* 1904 [2] 988).
- $C_{16}H_{18}ONBr_2J$  1) Jodmethylat d. 3,5-Dibrom-4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 165—170° (*A.* 334, 338 *C.* 1904 [2] 989).
- $C_{16}H_{18}ON_2ClP$  1) 2-Methylphenylmonamid d. 1,2,3,4-Tetrahydro-1-Chinolyolphosphinsäuremonochlorid. Sm. 122° (*A.* 326, 198 *C.* 1903 [1] 821).
- $C_{16}H_{20}O_2NSP$  \*1) Diäthylmonamid d. Thiophosphorsäurediphenylester. Sm. 70° (*A.* 326, 211 *C.* 1903 [1] 822).
- $C_{16}H_{24}ON_3Br_2P$  1) 2,4-Dibromphenylamid-1,1-Dipiperidid d. Phosphorsäure. Sm. 186° (*A.* 326, 236 *C.* 1903 [1] 867). — \*IV, 10.
- $C_{16}H_{25}ON_3SP$  1) 1,1-Dipiperidid d. Thiophosphorsäuremonophenylester. Sm. 108° (*A.* 326, 217 *C.* 1903 [1] 822). — \*IV, 10.
- $C_{16}H_{25}ON_3BrP$  1) 3-Bromphenylmonamid-1,1-Dipiperidid d. Phosphorsäure (*A.* 326, 234 *C.* 1903 [1] 867).
- 2) 4-Bromphenylmonamid-1,1-Dipiperidid d. Phosphorsäure. Sm. 169° (*A.* 326, 233 *C.* 1903 [1] 867). — \*IV, 10.
- $C_{16}H_{28}O_2N_2J_4Hg_8$  1)  $\alpha$ -Verbindung (aus Methylheptenonoxim). Sm. 114° (*A.* 329, 188 *C.* 1903 [2] 1414).
- 2)  $\beta$ -Verbindung (aus Methylheptenonoxim). Sm. 150° u. Zers. (*A.* 329, 187 *C.* 1903 [2] 1414).

### $C_{17}$ -Gruppe.

- $C_{17}H_{12}$  \*1) Chrysofluoren. Sm. 188°; Sd. 413°. Pikrat (*A.* 335, 134 *C.* 1904 [2] 1134).
- $C_{17}H_{18}$  \*1)  $\alpha$ -Phenyl- $\beta$ -[4-Isopropylphenyl]äthen. Sm. 84° (85°) (*B.* 35, 3969 *C.* 1903 [1] 31; *A.* 333, 241 *C.* 1904 [2] 1390).
- $C_{17}H_{22}$  3) Kohlenwasserstoff (aus Benzyltanacetylalkohol). Sd 165°<sub>15</sub> (*B.* 36, 4370 *C.* 1904 [1] 455).
- $C_{17}H_{30}$  C 87,2 — H 12,8 — M. G. 234.
- 1) Kohlenwasserstoff (aus Petroleum). Sd. 210—215°<sub>60</sub> (*C.* 1904 [1] 61).

### — 17 II —

- $C_{17}H_{10}O$  \*1) Chrysoketon. Sm. 132,5° (*A.* 335, 132 *C.* 1904 [2] 1134).
- $C_{17}H_{11}N$  \*3)  $\alpha$ -Chrysidin (2,1-Naphtakridin). Sm. 108°. HCl, HNO<sub>3</sub>, Pikrat (*B.* 37, 2924 *C.* 1904 [2] 1411).
- \*4)  $\beta$ -Chrysidin (1,2-Naphtakridin). Sm. 131°. HCl, HNO<sub>3</sub>, Pikrat (*B.* 37, 2926 *C.* 1904 [2] 1412; *B.* 37, 3078 *C.* 1904 [2] 1474).
- 8)  $\alpha$ -Naphtophenantridin. Sm. 135,5°. HCl + H<sub>2</sub>O, Pikrat (*A.* 335, 127 *C.* 1904 [2] 1133).
- 9)  $\beta$ -Naphtophenantridin. Sm. 182°. HCl (*A.* 335, 129 *C.* 1904 [2] 1133).
- $C_{17}H_{12}O$  \*4) Phenyl-1-Naphtylketon (*B.* 37, 628 *C.* 1904 [1] 810).
- $C_{17}H_{13}O_2$  \*10) 2-Phenylnaphtalin-1-Carbonsäure. Sm. 114°. Ag (*A.* 335, 129 *C.* 1904 [2] 1134).
- $C_{17}H_{12}O_8$  \*13) Anhydrid d.  $\alpha\alpha$ -Diphenylpropen- $\beta\gamma$ -Dicarbonsäure. Sm. 147—150° u. Zers. (*A.* 330, 354 *C.* 1904 [1] 929).
- 22) Anhydrid d.  $\gamma\gamma$ -Diphenylpropen- $\alpha\beta$ -Dicarbonsäure. Sm. 96—98° + C<sub>6</sub>H<sub>6</sub> (*A.* 330, 357 *C.* 1904 [1] 929).
- 23) Aldehyd d. 2-Benzoxynaphtalin-1-Carbonsäure. Sm. 109° (*Bl.* [3] 29, 879 *C.* 1903 [2] 885).

- $C_{17}H_{12}O_4$  18) 2-Keto-5,6-Dioxy-1-Cinnamyliden-1,2-Dihydrobenzofuran. Sm. 236° (B. 37, 826 C. 1904 [1] 1152).  
 19) 3-Acetoxyphenanthren-2-Carbonsäure. Sm. 207—208° (B. 35, 4427 C. 1903 [1] 334).  
 20) 2-Acetoxyphenanthren-3-Carbonsäure. Sm. 210° (B. 35, 4428 C. 1903 [1] 334).  
 21) Lakton (aus d. Lakton  $C_{17}H_{14}O_5$ , Sm. 153°). Sm. 183° (A. 333, 264 C. 1904 [2] 1392).  
 22) Acetat d. 3-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 110—111° (B. 37, 2820 C. 1904 [2] 712).
- $C_{17}H_{12}O_5$  \*8) 4-Acetat d. 3,4-Dioxyphenanthrenchinon-3-Methyläther (Acetyl-methylmorpholchinon). Sm. 208—209° (corr.) (B. 35, 4415 C. 1903 [1] 344).  
 15)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propen-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 208—209° (A. 333, 255 C. 1904 [2] 1391).  
 16) isom. Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propen-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 205° (A. 333, 255 C. 1904 [2] 1391).  
 17) Lakton d.  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[3,4-Dioxyphenyl]äthan-3,4-Methylenäther- $\alpha$ -Ketocarbonsäure. Sm. 205° (B. 36, 2346 C. 1903 [2] 433).  
 18) isom. Lakton d.  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[3,4-Dioxyphenyl]äthan-3,4-Methylenäther- $\alpha$ -Ketocarbonsäure. Sm. 205° (B. 36, 2346 C. 1903 [2] 433).
- $C_{17}H_{12}O_6$  12) Fukugetin +  $1\frac{1}{2}H_2O$ . Sm. 288—290° (wasserfrei) (Soc. 85, 59 C. 1904 [1] 380, 729).  
 13) Diacetat d. 2,3-Dioxyxanthon. Sm. 186° (B. 37, 2735 C. 1904 [2] 542).
- $C_{17}H_{12}N_2$  8) 3'-Amido-1,2-Naphtakridin. Sm. 270°. HCl (B. 37, 3082 C. 1904 [2] 1474).
- $C_{17}H_{12}N$  10) 1,2-Naphto-2'-Methylcarbazol. Sm. 181°. Pikrat (A. 332, 103 C. 1904 [1] 1571).
- $C_{17}H_{12}N_3$  5) 1-[4-Methylphenyl]- $\beta\beta$ -Naphtisotriazol. Sm. 145° (A. 332, 103 C. 1904 [1] 1571).
- $C_{17}H_{14}O$  \*1) 1-[ $\alpha$ -Oxybenzyl]naphtalin ( $\alpha$ -Oxyphenyl-1-Naphtylmethan). Sm. 86° (B. 37, 628 C. 1904 [1] 810).  
 \*5)  $s$ -Keto- $\alpha s$ -Diphenyl- $\alpha\gamma$ -Pentadiën. (HCl, SbCl<sub>5</sub>), (HCl, SnCl<sub>4</sub>), + 2FeCl<sub>3</sub> (B. 37, 3670 C. 1904 [2] 1569).  
 \*6) Dibenzylidenacetone (C. 1903 [2] 284; B. 37, 1650 C. 1904 [1] 1603; B. 37, 3284 C. 1904 [2] 1038; B. 37, 3669 C. 1904 [2] 1569).  
 8)  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -[1-Naphtyl]metan. Sm. 85—86° (B. 37, 2757 C. 1904 [2] 707).  
 9) 2-Oxy-1-Benzylnaphtalin. Sm. 115—116° (G. 33 [2] 489 C. 1904 [1] 656).  
 10) 4-Oxy-1-Benzylnaphtalin. Sm. 125—126° (G. 33 [2] 471 C. 1904 [1] 655).
- $C_{17}H_{14}O_2$  28) 5-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 176° (B. 36, 1494 C. 1903 [1] 1350; B. 37, 1133 C. 1904 [1] 1256).  
 29)  $\gamma$ -Keto- $\beta$ -Benzoyl- $\alpha$ -Phenyl- $\alpha$ -Buten (Benzylidenbenzoylacetone). Sm. 98—99° (B. 36, 2134 C. 1903 [2] 366).  
 30) Lakton d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyl- $\beta$ -Buten- $\gamma$ -Carbonsäure. Sm. 88,5° (Soc. 83, 290 C. 1903 [1] 877).  
 31) Verbindung (aus  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenylbutan- $\alpha\gamma$ -Dicarbonsäure). Sm. 138—139° (Soc. 83, 293 C. 1903 [1] 877).
- $C_{17}H_{14}O_3$  \*1)  $\gamma$ -Keto- $\alpha s$ -Di[2-Oxyphenyl]- $\alpha\delta$ -Pentadiën (Lygosin). Na, Na<sub>2</sub> + 7 H<sub>2</sub>O (C. 1903 [1] 835).  
 \*3) Dibenzoylacetone (B. 37, 3449 C. 1904 [2] 1273).  
 39) lab.  $\gamma$ -Keto- $\alpha s$ -Di[4-Oxyphenyl]- $\alpha\delta$ -Pentadiën. Sm. 232°. HCl (B. 36, 133 C. 1903 [1] 458).  
 40) stab.  $\gamma$ -Keto- $\alpha s$ -Di[4-Oxyphenyl]- $\alpha\delta$ -Pentadiën. Sm. 237—238°. HCl, HBr, H<sub>2</sub>SO<sub>4</sub> (B. 36, 130 C. 1903 [1] 457).  
 41)  $\alpha$ -Keto- $\alpha\beta$ -Diphenyl- $\beta$ -Buten- $\gamma$ -Carbonsäure (Desylenpropionsäure). Sm. 174,5° (Soc. 83, 289 C. 1903 [1] 877).  
 42) Lakton d.  $\gamma$ -Oxy- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpropen-4-Methyläther- $\alpha$ -Carbonsäure. Sm. 105° (B. 36, 2524 C. 1903 [2] 575).

- $C_{17}H_{14}O_3$  43) Lakton d.  $\gamma$ -Oxy- $\beta$ -Phenyl- $\gamma$ -[4-Oxyphenyl]propen-4-Methyläther- $\alpha$ -Carbonsäure. Sm. 105° (A. 333, 273 C. 1904 [2] 1392).  
44) Lakton d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 122° (B. 36, 2524 C. 1903 [2] 575; A. 333, 273 C. 1904 [2] 1392).
- $C_{17}H_{14}O_4$  \*3) Dimethyläther d. 7,8-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 151° (B. 36, 4239 C. 1904 [1] 381).  
\*11)  $\alpha\alpha$ -Diphenylpropen- $\beta\gamma$ -Dicarbonsäure (A. 330, 352 C. 1904 [1] 929).  
25) Monomethyläther d. 1,7-Dioxy-2,6-Dimethyl-9,10-Anthrachinon. Sm. 214—215° (Soc. 83, 1332 C. 1904 [1] 100).  
26) Dimethyläther d. 5,6-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran. Sm. 148—149,5° (B. 29, 2433). — \*III, 532.  
27) Dimethyläther d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 128 bis 129° (B. 37, 778 C. 1904 [1] 1156).  
28) 6-Aethyläther d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 177 bis 178° (B. 37, 777 C. 1904 [1] 1156).  
29)  $\gamma\gamma$ -Diphenylpropen- $\alpha\beta$ -Dicarbonsäure. Sm. 105—115° u. Zers.  $Ca + 2H_2O$ ,  $Ba + 3\frac{1}{2}H_2O$ ,  $Ag_2$  (A. 330, 357 C. 1904 [1] 929).  
30) 3,4-Dioxyphenanthrendimethyläther- $p$ -Carbonsäure. Sm. 196° (B. 35, 4392 C. 1903 [1] 339).  
31)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 191° (A. 333, 268 C. 1904 [2] 1392).  
32) Aethyl ester d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Diphenyläthan-2-Carbonsäure. Sm. 71° (B. 23, 1345). — \*II, 1098.  
33) Verbindung (aus Chrysarobin). Sm. 181° (Soc. 81, 1583 C. 1903 [1] 34, 167).
- $C_{17}H_{14}O_6$  26) Trimethyläther d. 1,2,3-Triox-9,10-Anthrachinon. Sm. 168° (M. 23, 1020 C. 1903 [1] 291).  
27) 2<sup>3</sup>,6-Dimethyläther d. 3,6-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 187—188° (B. 37, 2348 C. 1904 [2] 230).  
28) 2<sup>3</sup>,6-Dimethyläther d. 3,6-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 144° (B. 37, 959 C. 1904 [1] 1160).  
29) 2<sup>4</sup>,6-Dimethyläther d. 3,6-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 184—185° (B. 37, 783 C. 1904 [1] 1159).  
30) 2<sup>3</sup>,7-Dimethyläther d. 3,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 203° (B. 37, 4157 C. 1904 [2] 1658).  
31) 2<sup>3</sup>,7-Dimethyläther d. 3,7-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 170° (B. 37, 4160 C. 1904 [2] 1658).  
32) 2<sup>4</sup>,7-Dimethyläther d. 3,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 196—197° (B. 37, 4162 C. 1904 [2] 1659).  
33) 5,7-Dimethyläther d. 3,5,7-Triox-2-Phenyl-1,4-Benzpyron. Sm. 177—178° (B. 37, 2804 C. 1904 [2] 712).  
34) 7,8-Dimethyläther d. 3,7,8-Triox-2-Phenyl-1,4-Benzpyron. Sm. 203° (B. 37, 2808 C. 1904 [2] 713).  
35)  $\gamma$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propen-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 147° (A. 333, 266 C. 1904 [2] 1392).  
36)  $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 157° (A. 333, 263 C. 1904 [2] 1391).  
37) 3,4,6-Trioxphenanthren-3,6-Dimethyläther-9-Carbonsäure. Sm. 254—256° (B. 35, 4409 C. 1903 [1] 343).  
38)  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 153° (A. 333, 260 C. 1904 [2] 1391).  
39) isom. Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 155° (A. 333, 260 C. 1904 [2] 1391).  
40) Diacetat d. 2,3-Dioxyxanthen. Sm. 110° (B. 37, 2735 C. 1904 [2] 542).
- $C_{17}H_{14}O_6$  7) 5,6-Dimethyläther d. 5,6-Dioxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. K (Soc. 83, 137 C. 1903 [1] 90, 466).
- $C_{17}H_{14}N_2$  19) Benzyliden-2-Naphtylhydrazin. Sm. 194° (C. 1903 [2] 427).  
 $C_{17}H_{14}N_4$  2) 3-Methyl-1,4-Diphenylbipyrazol. Sm. 232° Ag (B. 36, 527 C. 1903 [1] 642).

- $C_{17}H_{15}N$  \*1) 1-[2-Methylphenyl]amidonaphtalin. *Sd.* 395—405° (*B.* 37, 2924 *C.* 1904 [2] 1411).  
 \*3) 2-[2-Methylphenyl]amidonaphtalin. *Sd.* 400—405° (*B.* 37, 2926 *C.* 1904 [2] 1412).  
 14) 4-[4-Methylbenzyl]isochinolin. *Sm.* 66—67° (3HCl, 2HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub>, Pikrat (*A.* 326, 297 *C.* 1903 [1] 929).
- $C_{17}H_{15}N_3$  19) 4-Methyl-6-[3-Amidophenyl]-2-Phenyl-1,3-Diazin. *Sm.* 104—105° (*Soc.* 83, 1375 *C.* 1904 [1] 450).  
 5)  $\gamma$ -Keto- $\alpha\gamma$ -Diphenyl- $\alpha$ -Penten. *Sm.* 53° (*A.* 330, 233 *C.* 1904 [1] 945).
- $C_{17}H_{16}O$   
 $C_{17}H_{16}O_2$  \*15) Dimethylphenyl-*m*-Bisicyklohexanon. *Sm.* 151°; *Sd.* 355° (*B.* 36, 2148 *C.* 1903 [2] 369).  
 \*23) Aethyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen. *Sm.* 77—78° (*Soc.* 85, 462 *C.* 1904 [1] 1079, 1438).
- $C_{17}H_{18}O_3$  56) Trimethyläther d. 3,4,6-Trioxypheanthren (Methylthebaol). *Fl.* Pikrat (*B.* 35, 4406 *C.* 1903 [1] 342; *B.* 35, 4411 *C.* 1903 [1] 343; *B.* 36, 3081 *C.* 1903 [2] 955).  
 57)  $\delta$ -Oxy- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten- $\delta$ -Carbonsäure. *Sm.* 168° (*A.* 333, 281 *C.* 1904 [2] 1393).  
 58)  $\beta$ -Keto- $\alpha\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. *Sm.* 128° (*A.* 333, 282 *C.* 1904 [2] 1393).  
 59) Säure (aus Benzaldehyd u. Bernsteinsäurediäthylester). *Sm.* 170—171° u. Zers. Ca, Ba + H<sub>2</sub>O (*B.* 37, 2247 *C.* 1904 [2] 328).  
 60) Gem. Anhydrid d. Benzolcarbonsäure u. 1,3,5-Trimethylbenzol-2-Carbonsäure. *Sm.* 105° (*B.* 36, 2537 *Aum.* *C.* 1903 [2] 720).  
 61)  $\beta\delta$ -Lakton d.  $\beta\delta$ -Dioxy- $\alpha\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. *Sm.* 113° (*A.* 333, 278 *C.* 1904 [2] 1392).  
 62) isom.  $\beta\delta$ -Lakton d.  $\beta\delta$ -Dioxy- $\alpha\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. *Sm.* 153° (*A.* 333, 278 *C.* 1904 [2] 1392).
- $C_{17}H_{16}O_4$  32)  $\alpha^2\gamma^4$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[2-Oxyphenyl]propen. *Sm.* 94° (*B.* 37, 4156 *C.* 1904 [2] 1658).  
 33)  $\alpha^2\gamma^4$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3-Oxyphenyl]propen. *Sm.* 80—81° (*B.* 37, 4159 *C.* 1904 [2] 1658).  
 34) Dimethyläther d.  $\alpha\gamma$ -Diketo- $\gamma$ -Phenyl- $\alpha$ -[3,5-Dioxyphenyl]propan. *Sm.* 75° Cu + C<sub>6</sub>H<sub>6</sub> (*B.* 35, 3902 *C.* 1903 [1] 27).  
 35) Dimethyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -Phenyl- $\gamma$ -[2,4-Dioxyphenyl]propan. *Sm.* 55° Cu (*C.* 1903 [1] 580; *Soc.* 85, 160 *C.* 1904 [1] 724).  
 36) 3,4-Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxyphephenyl]- $\alpha$ -Phenylpropen. *Sm.* 98° (*B.* 36, 4238 *C.* 1904 [1] 381).  
 37) Dimethyläther d. 6-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. *Sm.* 120° (*B.* 37, 2348 *C.* 1904 [2] 230).  
 38) Dimethyläther d. 6-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. *Sm.* 104° (*B.* 37, 958 *C.* 1904 [1] 1160).  
 39) Dimethyläther d. 6-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. *Sm.* 160° (*B.* 37, 782 *C.* 1904 [1] 1159).  
 40) Dimethyläther d. 7-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. *Sm.* 102° (*B.* 37, 4157 *C.* 1904 [2] 1658).  
 41) Dimethyläther d. 7-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. *Sm.* 104° (*B.* 37, 4159 *C.* 1904 [2] 1658).  
 42) Dimethyläther d. 7-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. *Sm.* 94—95° (*B.* 37, 4161 *C.* 1904 [2] 1659).  
 43) Dimethyläther d. 5,7-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. *Sm.* 146—147° (*B.* 37, 2803 *C.* 1904 [2] 712).  
 44) Dimethyläther d. 7,8-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. *Sm.* 115° (*B.* 36, 4243 *C.* 1904 [1] 382; *B.* 37, 2807 *C.* 1904 [2] 713).  
 45)  $\gamma$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen-4-Methyläther- $\gamma$ -Carbonsäure. *Sm.* 145° (*A.* 333, 273 *C.* 1904 [2] 1392).  
 46)  $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. *Sm.* 148° (*A.* 333, 272 *C.* 1904 [2] 1392).  
 47) 2-Methyl-1-Benzyliden-*R*-Penten-5-Carbonsäure-4-[Aethyl- $\beta$ -Carbonsäure]. Zers. bei 203° Ag<sub>2</sub> (*B.* 36, 951 *C.* 1903 [1] 1022).  
 48)  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. *Sm.* 123° (*A.* 333, 270 *C.* 1904 [2] 1392).  
 49) isom. Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. *Sm.* 155° (*A.* 333, 271 *C.* 1904 [2] 1392).

- $C_{17}H_{16}O_4$  50) Diphenylester d. Propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 54°; Sd. 236,5°<sub>15</sub> (B. 35, 4085 C. 1903 [1] 75).  
 51) Phenylbenzylester d. Bernsteinsäure. Sm. 51°; Sd. 245—250°<sub>5</sub> (B. 35, 4077 C. 1903 [1] 74).
- $C_{17}H_{16}O_5$  \*8) Dibenzoat d.  $\alpha\beta\gamma$ -Trioxypropan (B. 36, 1573 Anm. C. 1903 [2] 225).  
 12) 1,3,8-Trioxo-2,4,5,7-Tetramethylfluoron.  $H_2SO_4$  (M. 25, 666 C. 1904 [2] 1144).
- $C_{17}H_{16}O_6$  14) Di[2,4-Dioxy-1-Acetyl- $\beta$ -Phenyl]methan. Sm. oberh. 250° (C. 1903 [1] 922).  
 15) Methylenbisvanillin. Sm. 155—156° (D.R.P. 75 264, 76 061). — \*III, 75.
- $C_{17}H_{16}O_8$  C 58,6 — H 4,6 — O 36,8 — M. G. 348.  
 1) Di[Acetyl- $\beta$ -Trioxyphenyl]methan. Sm. 265° (C. 1903 [1] 922).
- $C_{17}H_{16}N_2$  19)  $\epsilon$ -Phenylimido- $\alpha$ -Phenylamido- $\alpha\gamma$ -Pentadien. Sm. 85—86° u. Zers. HCl, (2 HCl, PtCl<sub>4</sub>), HBr, (HJ, J<sub>2</sub>) (A. 333, 308, 314 C. 1904 [2] 1149).  
 20) 2,6-Diphenyl-4-Methyl-1,4-Dihydro-1,3-Diazin. Sm. 149—150° (2 HCl, PtCl<sub>4</sub>) (Soc. 83, 1374 C. 1904 [1] 164, 450).
- $C_{17}H_{16}N_4$  6) 4,4'-Di[Methyleyanamidophenyl]methan. Sm. 155° (B. 37, 2672 C. 1904 [2] 443).
- $C_{17}H_{17}N_8$  6) 5-[4-Methylphenyl]amido-3-Methyl-1-Phenylpyrazol. Sm. 111° (C. 1900 [2] 654; B. 36, 3273).  
 7) 5-Methylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 88,5°; Sd. 220—228°<sub>20</sub>. (2 HCl, PtCl<sub>4</sub>) (B. 36, 3277 C. 1903 [2] 1189).  
 8) Anilopyrin. Sm. 58—59°. (2 HCl, PtCl<sub>4</sub>), HJ, Pikrat (B. 36, 3275 C. 1903 [2] 1189).
- $C_{17}H_{18}O$  \*4)  $\gamma$ -Keto- $\alpha\epsilon$ -Diphenylpentan (A. 330, 234 C. 1904 [1] 945).  
 $C_{17}H_{18}O_8$  15) 4-Keto-1,3-Diacetyl-6-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 68° (B. 36, 2145 C. 1903 [2] 369).  
 16) Aldehyd d. 3,4-Dioxybenzol-3-Propyläther-4-Benzyläther-1-Carbonsäure. Sm. 74° (D.R.P. 85 196). — \*III, 75.  
 17) Propylester d.  $\alpha$ -Oxydiphenylessigsäure. Sd. 220°<sub>55</sub> (B. 37, 2766 C. 1904 [2] 708).
- $C_{17}H_{18}O_4$  11)  $\alpha$ -Acetat d.  $\alpha$ -Oxydi[4-Oxyphenyl]methan-4,4'-Dimethyläther. Sm. 83,5° (B. 36, 655 C. 1903 [1] 768).
- $C_{17}H_{18}O_5$  12) 1,3,6,8-Tetraoxo-2,4,5,7-Tetramethylxanthen. Sm. 320—324° (M. 25, 674 C. 1904 [2] 1145).
- $C_{17}H_{18}O_{10}$  4) Pentaacetat d. 2,4,6-Trioxo-1-Dioxymethylbenzol. Sm. 155—156° (M. 24, 805 C. 1904 [1] 367).
- $C_{17}H_{19}N_2$  \*5) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -[4-Isopropylphenyl]essigsäure. Sm. 86° (B. 37, 4085 C. 1904 [2] 1723).
- $C_{17}H_{18}Br_2$  \*1)  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[4-Isopropylphenyl]äthan. Sm. 181° (A. 333, 241 C. 1904 [2] 1300).
- $C_{17}H_{19}N$  10) Allylbenzyl-2-Methylphenylamin. Sd. 180—183°<sub>27</sub>. Pikrat (B. 37, 3896 C. 1904 [2] 1612).  
 11) Allylbenzyl-4-Methylphenylamin. Sd. 214—215°<sub>31</sub>. Pikrat (B. 37, 2721 C. 1904 [2] 592).
- $C_{17}H_{20}O$  12) Benzylidentanaceton. Sd. 178° (B. 36, 4367 C. 1904 [1] 455).  
 13) Verbindung (aus d-Brombenzylidencampher). Sm. 68° (C. r. 132, 1574). — \*III, 388.  
 14) Verbindung (aus i-Brombenzylidencampher). Sm. 43° (C. r. 132, 1574). — \*III, 388.
- $C_{17}H_{20}O_2$  \*11) d- $\alpha$ -Benzoylcampher. Sm. 88° (B. 36, 2629, 2639 C. 1903 [2] 625; C. r. 136, 1223 C. 1903 [2] 116).  
 13) 4,4'-Dioxy-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 181—182° (B. 36, 1891 C. 1903 [2] 291; B. 37, 1471 C. 1904 [1] 1518).  
 14)  $\alpha$ -Oxybenzylidencampher (Benzoylcampher-Enolform). Sm. 221° (Soc. 83, 98 C. 1903 [1] 233, 458).  
 15) Benzoat d. 1-Oxycamphen. Sd. 215—220°<sub>50</sub> (Soc. 83, 152 C. 1903 [1] 72, 436).
- $C_{17}H_{20}O_3$  6)  $\alpha\gamma$ -Di[2-Methylphenyläther] d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 36—37°; Sd. 226°<sub>17</sub> (Soc. 83, 1137 C. 1903 [2] 1059).  
 7)  $\alpha\gamma$ -Di[3-Methylphenyläther] d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 232°<sub>13</sub> (Soc. 83, 1139 C. 1903 [2] 1059).  
 8) Oxoniumbase (aus p-Phenetol). HCl (B. 36, 653 C. 1903 [1] 768).  
 9) Aethylester d. Artemisinsäure. Sm. 97—98° (C. 1903 [2] 1377).

- $C_{17}H_{20}O_4$  \*4) Acetat d. Desmotroposantonin. Sm. 156° (*C.* 1904 [1] 941).  
 \*5) Acetat d. l-Desmotroposantonin. Sm. 154° (*C.* 1904 [1] 941).  
 \*6) Acetat d. r-Desmotroposantonin. Sm. 145° (*C.* 1904 [1] 941).  
 \*7) Acetat d. d-Desmotroposantonin. Sm. 154° (*C.* 1904 [1] 941).  
 16) Acetat d. l-r-Desmotroposantonin. Sm. 142° (*C.* 1904 [1] 941).
- $C_{17}H_{20}O_6$  3) Dimethyläther d. Methylenbismethylphloroglucin. Sm. 228—229° (*A.* 329, 282 *C.* 1904 [1] 796).  
 4) Methylenbisilicinsäure (*A.* 329, 290 *C.* 1904 [1] 796).
- $C_{17}H_{20}O_8$  5) Triäthylester d. 6-Oxybenzylmethyläther-1,3-Dicarbonsäure-4-Methylcarbonsäure. Sm. 78° (*B.* 37, 2120 *C.* 1904 [2] 438).
- $C_{17}H_{20}N_2$  13)  $\alpha$ -Phenylimido- $\alpha$ -Diäthylamido- $\alpha$ -Phenylmethan. *Sd.* 188—189°<sub>10</sub>. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 37, 2682 *C.* 1904 [2] 521).
- $C_{17}H_{21}N_3$  \*2) 4-Dimethylamido-1-[4-Dimethylamidobenzyliden]amidobenzol. Sm. 229° (*B.* 37, 858 *C.* 1904 [1] 1206).  
 \*8)  $\alpha$ -Imidodi[3-Methylamido-4-Methylphenyl]methan? (Auramin G.). Sm. 119—120°. H<sub>2</sub>SO<sub>4</sub>, Pikrat, Oxalat (*C.* 1903 [1] 399).  
 9) 4-Dimethylamido-1-[4-Aethylamidobenzyliden]amidobenzol (*B.* 37, 857 *C.* 1904 [1] 1206).  
 10) 4-[4-Methylamido-3-Methylbenzyliden]amido-1-Dimethylamido-benzol. Sm. 162° (*B.* 37, 862 *C.* 1904 [1] 1206).  
 11) 4-Diäthylamidobenzylidenphenylhydrazin. Sm. 103° (*B.* 37, 861 *C.* 1904 [1] 1206).
- $C_{17}H_{22}O$  \*2) d-Benzylidenmenthon. *Sd.* 184—185°<sub>10</sub> (*B.* 37, 234 *C.* 1904 [1] 725; *C.* 1904 [2] 1043).  
 \*5) isom. Benzylidenmenthon. Sm. 47° (*C.* 1904 [2] 1044).  
 \*6) isom. Benzylidenmenthon. Sm. 51° (*C.* 1904 [2] 1044).  
 8) 3-Keto-4-[4-Isopropylidenphenyl]-1-Methylhexahydrobenzol. Sm. 58° (*C. r.* 136, 1225 *C.* 1903 [2] 116).  
 9) Benzyltanacetone. *Sd.* 180—181°<sub>15</sub> (*B.* 36, 4370 *C.* 1904 [1] 455).
- $C_{17}H_{22}O_3$  \*5) Podocarpinsäure (*See.* 85, 1242 *C.* 1904 [2] 1308).  
 9) 2-Oxy-3-Keto-2-Benzoyl-4-Isopropyl-1-Methylhexahydrobenzol (Benzoyloxymenthon). Sm. 87°; *Sd.* 208—210°<sub>12</sub> u. Zers. (*C.* 1904 [2] 1044).  
 10) isom. Benzoyloxymenthon. Sm. 71—72° (*C.* 1904 [2] 1045).  
 11) isom. Benzoyloxymenthon. Sm. 100° (*C.* 1904 [2] 1045).  
 12) d-Bornylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 44—45° (*C.* 1904 [1] 1580; 1904 [2] 1043).
- $C_{17}H_{22}O_5$  9) Diäthylester d.  $\beta$ -Benzoylbutan- $\alpha\alpha$ -Dicarbonsäure. *Fl.* (*C.* 1904 [1] 1258).
- $C_{17}H_{22}O_6$  4) Olivacein + H<sub>2</sub>O. Sm. 156° (*J. pr.* [2] 68, 50 *C.* 1903 [2] 513).  
 5) Olivaceasäure. Sm. 138° (*J. pr.* [2] 68, 51 *C.* 1903 [2] 513).  
 6) Acetoxymparasantonsäure. Sm. 207° (*C.* 1903 [2] 1377).
- $C_{17}H_{24}O$  \*4) 3-Keto-4-Isopropyl-2-Benzyl-1-Methylhexahydrobenzol. *Sd.* 175° bis 180°<sub>10</sub> (*B.* 37, 236 *C.* 1904 [1] 726).  
 5) Benzyltanacetylalkohol. *Sd.* 181—182°<sub>15</sub> (*B.* 36, 4370 *C.* 1904 [1] 455).
- $C_{17}H_{24}O_2$  \*4) Benzoat d. l-Menthol. Sm. 55°; *Sd.* 179°<sub>12</sub> (*A.* 327, 194 *C.* 1903 [1] 1396).  
 5) Capronat d.  $\gamma$ -[2-Oxyphenyl]- $\beta$ -Penten. *Sd.* 175—177°<sub>20</sub> (*Bl.* [3] 29, 354 *C.* 1903 [1] 1222).  
 6) Benzoat d. d-Menthol. Sm. 82° (*J. pr.* [2] 63, 57). — \*III, 336.
- $C_{17}H_{24}O_3$  13) Äthylester d. Desmotroposantonigen Säure. Sm. 116—117° (*G.* 25 [1] 514). — \*II, 978.
- $C_{17}H_{24}O_4$  \*5) Äthylester d. Parasantonsäure. Sm. 172° (*C.* 1903 [2] 1446).  
 9) Diacetat d. 4-Dioxymethyl-5-tert. Butyl-1,3-Dimethylbenzol. Sm. 87° (*B.* 32, 3648). — \*III, 45.
- $C_{17}H_{24}O_5$  8)  $\alpha\gamma$ -Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -[3-Oxyphenyl]- $\beta\beta$ -Dimethylpropan-3-Äthyläther. *Sd.* 202°<sub>13</sub> (*M.* 24, 172 *C.* 1903 [1] 968).
- $C_{17}H_{24}O_6$  4)  $\alpha\alpha\gamma\gamma\gamma$ -Hexaacetylpentan (Dimethylentrisacetylaceton). Sm. 101° (*B.* 36, 2179 *C.* 1903 [2] 372).  
 5) Verbindung (aus Acetylaceton u. Formaldehyd). Sm. 181° (*A.* 323, 109; *A.* 332, 21 *Anm.* *C.* 1904 [1] 1565).
- $C_{17}H_{24}O_7$  3) Triäthylester d. Methylglutakonylglutakonsäure. *Sd.* 224—226° u. ger. Zers. (*C. r.* 136, 693 *C.* 1903 [1] 960).

- $C_{17}H_{24}O_{10}$  3) Tetraäthylester d.  $\alpha\delta$ -Diketopentan- $\alpha\beta\delta\epsilon$ -Tetracarbonsäure. Sm. 80—81° (*C. r.* 139, 137 *C.* 1904 [2] 602).
- $C_{17}H_{25}N$  8) Benzyltanacetylamin. Sd. 185—190°<sub>25</sub> (*B.* 36, 4371 *C.* 1904 [1] 455).
- $C_{17}H_{26}O$  \* 1) 3-Oxy-4-Isopropyl-2-Benzyl-1-Methylhexahydrobenzol. Sd. 179 bis 180° (*B.* 37, 236 *C.* 1904 [1] 725).
- 6) Verbindung (aus Guttapercha). Sm. 201—204° (*C.* 1903 [1] 83).
- 7) Verbindung (aus Guttapercha). Sm. 201—204° (*C.* 1903 [1] 83; 1903 [2] 1177).
- $C_{17}H_{26}O_4$  4) Diacetat d. 9-Methyl-3-Isopropenylbicyclo-[1,3,3]-Nonan-5,7-diol. Sd. 193—196°<sub>13</sub> (*B.* 36, 231 *C.* 1903 [1] 514).
- 5) Diacetat d. isom. 9-Methyl-3-Isopropenylbicyclo-[1,3,3]-Nonan-5,7-diol. Sd. 194—196°<sub>15</sub> (*B.* 36, 233 *C.* 1903 [1] 514).
- $C_{17}H_{26}O_5$  3) Verbindung (aus Guttapercha oder  $C_{17}H_{26}O_5$ ). Sm. 133° (*C.* 1903 [1] 84).
- $C_{17}H_{28}O$  4) Verbindung (aus Guttapercha). Sm. 190—197° (*C.* 1903 [1] 83).
- $C_{17}H_{28}O_2$  10) Gurjoresen. Sm. 40—43° (*Ar.* 241, 382 *C.* 1903 [2] 724).
- 11) Methyläther d. Storesinol (*Ar.* 239, 523). — \*III, 425.
- 12) 1-Menthylester d. 1,2,3,4-Tetrahydrobenzol-1-Carbonsäure. Sd. 176°<sub>12</sub> (*A.* 327, 195 *C.* 1903 [1] 1396).
- 13) 1-Menthylester d. 1,2,3,4-Tetrahydrobenzol-5-Carbonsäure. Sd. 178°<sub>12</sub> (*A.* 327, 195 *C.* 1903 [1] 1396).
- 14) Acetat d. Atractylol. Fl. (*Ar.* 241, 30 *C.* 1903 [1] 712).
- 15) Acetat d. Gurjuresinol. Sm. 96° (*Ar.* 241, 388 *C.* 1903 [2] 724).
- $C_{17}H_{28}O_3$  5) 1-Menthylester d.  $\beta$ -Keto- $\gamma$ -Hexen- $\gamma$ -Carbonsäure. Sm. 84—88° (*Soc.* 85, 51 *C.* 1904 [1] 360, 788).
- $C_{17}H_{28}O_4$  2) Pleopsidsäure. Sm. 131—132° (*Ag.* (*A.* 327, 317 *C.* 1903 [2] 508).
- $C_{17}H_{28}O_5$  2) Diäthylester d. Pulegonmalonsäure. Sd. 209—210°<sub>25</sub> (*B.* 33, 3186 Ann.). — \*III, 383.
- 3) Verbindung (aus Guttapercha). Sm. 120—125° (*C.* 1903 [1] 84).
- $C_{17}H_{30}O_2$  \* 2) Elaeomargarinsäure. Sm. 48° (*C.* 1904 [2] 949).
- 5) 1-Menthylester d.  $\alpha$ -Hexen- $\alpha$ -Carbonsäure. Sd. 174—175,5°<sub>14</sub> (*A.* 327, 177 *C.* 1903 [1] 1396).
- 6) 1-Menthylester d. Hexahydrobenzolcarbonsäure. Sm. 48°; Sd. 170°<sub>12</sub> (*A.* 327, 186, 196 *C.* 1903 [1] 1396).
- $C_{17}H_{30}O_4$  2) Säure (aus Chauliografsäure). *Ag.* (*Soc.* 85, 860 *C.* 1904 [2] 349, 604).
- $C_{17}H_{30}O_5$  3) Säure (aus Chauliografsäure). Sm. 128°. *Ag.* (*Soc.* 85, 861 *C.* 1904 [2] 349, 604).
- $C_{17}H_{32}O_2$  3) 1-Menthylester d. Oenanthsäure. Sd. 165°<sub>15</sub> (*B.* 31, 364). — \*III, 334.
- $C_{17}H_{32}O_3$  C 71,8 — H 11,6 — O 16,9 — M. G. 284.
- 1) Myristat d.  $\alpha$ -Oxy- $\beta$ -Ketopropan. Sd. 224—226°<sub>26</sub> (*C. r.* 138, 1275 *C.* 1904 [2] 93).
- $C_{17}H_{32}O_4$  \* 7) Lichestronsäure. Sm. 80° (*J. pr.* [2] 68, 33 *C.* 1903 [2] 512).
- $C_{17}H_{32}O_5$  \* 1) Oxyroccellsäure. Sm. 128° (*J. pr.* [2] 68, 67 *C.* 1903 [2] 514).
- $C_{17}H_{32}O_{10}$  2) Maclayin. Sm. 158—165° (*Ch. Z.* 20, 970). — \*III, 444.
- $C_{17}H_{34}O$  5) Aldehyd d. Margarinsäure. Sm. 36°. +  $C_2H_5O$  (Sm. 52°), +  $NaHSO_3$  (*Soc.* 85, 811 *C.* 1904 [2] 44, 509).
- $C_{17}H_{34}O_2$  \* 1) Margarinsäure. *Ag.* (*Soc.* 85, 836 *C.* 1904 [2] 509).
- 10) Säure (aus Schweinefett). Sm. 55—56° (*B.* 36, 2770 *C.* 1903 [2] 896; *C.* 1904 [2] 414).
- $C_{17}H_{34}O_3$  5)  $\alpha$ -Oxyhexadekan- $\alpha$ -Carbonsäure. Sm. 89° (*Soc.* 85, 838 *C.* 1904 [2] 509).
- $C_{17}H_{34}O_4$  2)  $\alpha$ -Myristat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 68°; Sd. 162° (*B.* 36, 4342 *C.* 1904 [1] 434).

## — 17 III —

- $C_{17}H_9O_4Br_7$  1) Diacetat d.  $\alpha,2,3,5,2',3',5'$ -Heptabrom-4,4'-Dioxydiphenylmethan. Sm. 227—228° (*A.* 330, 70 *C.* 1904 [1] 1147).
- $C_{17}H_{10}O_2N_2$  4) Methylenindigo =  $(C_{17}H_{10}O_2N_2)_x$  (*C.* 1903 [2] 835).
- $C_{17}H_{10}O_4Br_8$  1) Diacetat d.  $2,3,5,2',3',5'$ -Hexabrom-4,4'-Dioxydiphenylmethan. Sm. 215° (*A.* 330, 68 *C.* 1904 [1] 1147).
- $C_{17}H_{10}O_8Br_2$  1) Dibromfukugetin. Sm. 280° (*Soc.* 85, 60 *C.* 1904 [1] 380, 729).
- $C_{17}H_{10}O_8Br_4$  1) Aethyläther d. Tetrabrommyricetin. Sm. 146° (*Soc.* 85, 62 *C.* 1904 [1] 381, 729).

- $C_{17}H_{11}ON$  \*1) Oximidochrysofluoren. Sm. 202° u. Zers. (A. 335, 133 C. 1904 [2] 1134).  
 7) 7-Oxy-1,2-Naphtakridin. Sm. 322°. HCl (B. 37, 3080 C. 1904 [2] 1474).  
 8)  $\alpha$ -Naphthophenanthrindon. Sm. 332,5° (A. 335, 126 C. 1904 [2] 1133).  
 9)  $\beta$ -Naphthophenanthrindon. Sm. 338° (A. 335, 128 C. 1904 [2] 1133).
- $C_{17}H_{11}OBr$  3) Verbindung (aus Cinnamylidenacetophenon). Sm. 80—90° (C. 1903 [2] 945).
- $C_{17}H_{11}O_3N$  \*2) Benzoat d. 2-Oximido-1-Keto-1,2-Dihydronaphtalin. Sm. 189 bis 190° u. Zers. (B. 36, 4169 C. 1904 [1] 287).  
 7) Methyläther d. Oxyphenonaphtoxazon. Sm. 270—271° (B. 36, 1812 C. 1903 [2] 206).  
 C 62,8 — H 3,4 — O 29,5 — N 4,3 — M. G. 325.
- $C_{17}H_{11}O_5N$  1) 2-Keto-5,6-Dioxy-1-[4-Nitrocinnamyliden]-1,2-Dihydrobenzofuran. Sm. 265° (B. 37, 526 C. 1904 [1] 1152).
- $C_{17}H_{11}O_5N_3$  \*2) 3,5-Dinitro-2-[1-Naphtyl]amidobenzol-1-Carbonsäure. Sm. 226° u. Zers. (G. 33 [2] 328 C. 1904 [1] 278).  
 \*3) 3,5-Dinitro-2-[2-Naphtyl]amidobenzol-1-Carbonsäure. Sm. 210° u. Zers. (G. 33 [2] 329 C. 1904 [1] 278).  
 C 47,6 — H 2,6 — O 33,5 — N 16,3 — M. G. 429.
- $C_{17}H_{11}O_5N_5$  1) 2,4-Dinitrophenyläther d. 2,4-Dinitrophenylpyridoniumhydroxyd. Sm. 142—143° (A. 333, 302 C. 1904 [2] 1147).
- $C_{17}H_{12}OS$  \*1) Benzoat d. 1-Merkaptonaphtalin. Sm. 117—118° (Bl. [3] 29, 764 C. 1903 [2] 621).
- $C_{17}H_{12}O_2N_2$  \*11) Nitril d.  $\alpha$ -[4-Nitrophenyl]- $\delta$ -Phenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 209—210° (A. 336, 216 C. 1904 [2] 1732).  
 12) 2-[2-Nitrobenzyliden]amidonaphtalin. Sm. 91° (B. 36, 594 C. 1903 [1] 725).  
 13) 2-[3-Nitrobenzyliden]amidonaphtalin. Sm. 90° (B. 36, 593 C. 1903 [1] 724).  
 14)  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[2-Chinoly]äthen. Sm. 103°. HCl, (2HCl, 3HgCl<sub>2</sub>, 2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (B. 36, 1667 C. 1903 [2] 48).  
 15)  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[4-Chinoly]äthen. Sm. 162°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> (B. 36, 1669 C. 1903 [2] 49).  
 16)  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[4-Chinoly]äthen. Sm. 221°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, Pikrat (B. 36, 1670 C. 1903 [2] 49).
- $C_{17}H_{12}O_4N_2$  11) 4-Nitrobenzyläther d. 2-Oximido-1-Keto-1,2-Dihydronaphtalin. Sm. 199° (B. 36, 4169 C. 1904 [1] 287).
- $C_{17}H_{12}O_4N_4$  2) Nitril d.  $\beta$ -Cyan- $\alpha\gamma$ -Di[4-Nitrophenyl]propan- $\beta$ -Carbonsäure. Sm. 219—221° (G. 32 [2] 361 C. 1903 [1] 629).
- $C_{17}H_{12}O_4Br_2$  1) Dimethyläther d. 6,8-Dibrom-5,7-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 253° (B. 37, 3167 C. 1904 [2] 1059).
- $C_{17}H_{12}O_4Br_4$  1) Diacetat d. 3,5,3',5'-Tetrabrom-4,4'-Dioxydiphenylmethan. Sm. 168 bis 169° (B. 36, 1886 C. 1903 [2] 291; A. 330, 67 C. 1904 [1] 1147).
- $C_{17}H_{12}O_5N_4$  C 58,0 — H 3,4 — O 22,7 — N 15,9 — M. G. 352.  
 1) 5-Keto-3-Methyl-4-[2,4-Dinitrobenzyliden]-1-Phenyl-4,5-Dihydro-pyrazol. Sm. 160° (B. 37, 1870 C. 1904 [1] 1604).
- $C_{17}H_{13}ON$  \*5) 2-Amidophenyl-1-Naphtylketon. Sm. 140,5° (B. 35, 4277 C. 1903 [1] 333).  
 28) 3-Phenyl-5-[ $\beta$ -Phenyläthenyl]isoxazol? Sm. 126—127° (B. 36, 1498 C. 1903 [1] 1351).
- $C_{17}H_{13}OBr_3$  1) Tribromdihydrocinnamylidenacetophenon. Sm. 129° u. Zers. (C. 1903 [2] 945).
- $C_{17}H_{13}O_2N$  38) 3,4-Methylenäther d. 3-[3,4-Dioxybenzyliden]-2-Methylindol. HCl (B. 37, 323 C. 1904 [1] 668).  
 39) 1-Phenylamidonaphtalin-1<sup>2</sup>-Carbonsäure. Sm. 205—206° (D.R.P. 145189 C. 1903 [2] 1097).  
 40) 2-Phenylamidonaphtalin-2<sup>2</sup>-Carbonsäure. Sm. 208—209° (D.R.P. 145189 C. 1903 [2] 1097).  
 41) Nitril d.  $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\gamma$ -Carbonsäure ( $\beta$ -Cyan-diphenacyl). Sm. 118° (B. 36, 2415 C. 1903 [2] 500).  
 42) Verbindung (aus 2-Methylchinolin u. Protokatechualdehyd). Sm. 249°. HCl + H<sub>2</sub>O (B. 36, 4331 C. 1904 [1] 449).

- $C_{17}H_{13}O_2N$  43) Verbindung (aus 4-Methylchinolin u. Protokatechualdehyd).  $HCl$ , (2  $HCl$ ,  $PtCl_4$ ) (*B.* 36, 4331 *C.* 1904 [1] 449).
- $C_{17}H_{13}O_2N_3$  5) 2-Phenylsemicarbazon-1-Keto-1,2-Dihydronaphtalin. Sm. 250 bis 251° (*A.* 334, 200 *C.* 1904 [2] 835).
- 6) 4-Methyl-6-[3-Nitrophenyl]-2-Phenyl-1,3-Diazin. Sm. 137—138° (*Soc.* 83, 1375 *C.* 1904 [1] 164, 450).
- 7) Phenylamid d. 4-Oxy-1-Naphtylazoameisensäure. Sm. 235° u. Zers. (*A.* 334, 197 *C.* 1904 [2] 835).
- $C_{17}H_{13}O_2N_5$  C 64,0 — H 4,1 — O 10,0 — N 21,9 — M. G. 319.
- 1) *p*-Nitro-3-Methyl-1,4-Diphenylpyrazol. Sm. oberh. 300° (*B.* 36, 528 *C.* 1903 [1] 642).
- 2) Nitril d. Methyl-4- $[\alpha$ -Cyan-4-Nitrobenzyliden]amidophenylamidoessigsäure. Sm. 195° (*B.* 37, 2638 *C.* 1904 [2] 519).
- $C_{17}H_{13}O_2Br$  4) *p*-Brom- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ - $\gamma$ -Butadien- $\alpha$ -Carbonsäure, Sm. 200—201° (*J. pr.* [2] 68, 534 *C.* 1904 [1] 452).
- $C_{17}H_{13}O_3N$  \*12) Säure (aus 2-Methylindol u. Phtalsäureanhydrid). Sm. 200° (*B.* 37, 1223 *C.* 1904 [1] 1272).
- 21) *p*-Nitro-4-Oxy-1-Benzylnaphtalin. Zers. bei 80—90° (*G.* 33 [2] 477 *C.* 1904 [1] 655).
- $C_{17}H_{13}O_3N_3$  10) 5-Keto-3-Methyl-4-[2-Nitrobenzyliden]-1-Phenyl-4,5-Dihydro-pyrazol. Sm. 154° (*B.* 37, 1870 *C.* 1904 [1] 1601).
- 11) Anhydrid d. Phenylimidoessigsäure-2-Carbonsäure- $\alpha$ -Acetylphenylhydrazid. Sm. 260—262° (*A.* 332, 238 *C.* 1904 [2] 38).
- $C_{17}H_{13}O_3Br$  8) Acetat d. Bromdioxymethylphenanthren. Sm. 166° (*A.* 297, 214). — \*III, 672.
- $C_{17}H_{13}O_4N$  13)  $\gamma$ -Keto- $\beta$ -Benzoyl- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten. Sm. 111—112° (*Soc.* 83, 1377 *C.* 1904 [1] 164, 450).
- 14)  $\delta$ -Phenyl- $\alpha$ -[4-Nitrophenyl]- $\alpha$ - $\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 259° u. Zers.  $Na + 2H_2O$  (*B.* 37, 1123 *C.* 1904 [1] 1210; *A.* 336, 215 *C.* 1904 [2] 1732).
- 15) Methylester d.  $\alpha$ -Phtalylamidophenylessigsäure. Sm. 99° (*B.* 37, 1689 *C.* 1904 [1] 1524).
- 16) Phenylester d.  $\alpha$ -Phtalylamidopropionsäure. Sm. 99° (*M.* 25, 778 *C.* 1904 [2] 1121).
- 17) 1-Naphtylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure. Sm. 163° (*D. R. P.* 53315). — \*II, 1112.
- 18) 2-Naphtylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure. Sm. 216° (*D. R. P.* 53315). — \*II, 1112.
- $C_{17}H_{13}O_4N_3$  8) Methylester d. 5-Benzoxyl-1-Phenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 104—105° (*A.* 335, 77 *C.* 1904 [2] 1230).
- $C_{17}H_{13}O_4Br_3$  1) Dimethyläther d. 3,6,8-Tribrom-5,7-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 174—175° u. Zers. (*B.* 37, 3167 *C.* 1904 [2] 1059).
- $C_{17}H_{13}O_7N_3$  5) Acetat d.  $\gamma$ -Oximido- $\beta$ -Nitro- $\alpha$ -Keto- $\gamma$ -[4-Nitrophenyl]- $\alpha$ -Phenylpropan. Sm. 158° u. Zers. (*A.* 328, 230 *C.* 1903 [2] 999).
- $C_{17}H_{13}N_4Br$  1) *p*-Brom-3-Methyl-1,4-Diphenylbipyrazol (*B.* 36, 528 *C.* 1903 [1] 642).
- $C_{17}H_{14}ON_2$  46) Inn. Anhydrid d. Chinolinphenacyloxim. Sm. 72°.  $HCl + H_2O$ , (2  $HCl$ ,  $PtCl_4$ ), ( $HCl$ ,  $AuCl_3$ ),  $HBr$  (*Ar.* 240, 695 *C.* 1903 [1] 402).
- 47) Inn. Anhydrid d. Isochinolinphenacyloxim. Sm. 121°.  $HCl + H_2O$ , (2  $HCl$ ,  $PtCl_4$ ), ( $HCl$ ,  $AuCl_3$ ) (*Ar.* 240, 703 *C.* 1903 [1] 403).
- $C_{17}H_{14}ON_4$  5) 4,4'-Di[Methylecyanamidophenyl]keton. Sm. 236° (*B.* 37, 2673 *C.* 1904 [2] 443).
- $C_{17}H_{14}OBr_2$  1)  $\delta$ -Dibrom- $\gamma$ -Keto- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Penten. Sm. 163° u. Zers. (*B.* 36, 1498 *C.* 1903 [1] 1351).
- 2) Dibromdihydrocinnamylidenacetophenon. Sm. 104° (*C.* 1903 [2] 945).
- $C_{17}H_{14}OBr_4$  \*1)  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Keto- $\alpha$ - $\delta$ -Diphenylpentan (*C.* 1903 [1] 399).
- $C_{17}H_{14}O_2N_2$  \*10) 3-Keto-4-Benzoyl-5-Methyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 102°.  $Na$  (*B.* 36, 526 *C.* 1903 [1] 641).
- $C_{17}H_{14}O_2N_4$  3) 3,5-Di[Benzoylamido]pyrazol. Sm. 207—208° (*B.* 37, 3525 *C.* 1904 [2] 1314).
- $C_{17}H_{14}O_2Br_2$  \*2)  $\gamma$ - $\delta$ -Dibrom- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 180—181° (174°) (*J. pr.* [2] 68, 527 *C.* 1904 [1] 451; *B.* 37, 1124 *C.* 1904 [1] 1210; *A.* 336, 227 *C.* 1904 [2] 1733).

- $C_{17}H_{14}O_3N_2$  11)  $\alpha$ -Oxy- $\alpha$ -[2-Nitrophenyl]- $\beta$ -[2-Chinolyl]äthan. Sm. 168°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 36, 1668 C. 1903 [2] 49).
- $C_{17}H_{14}O_3Br_2$  7) Trimethyläther d.  $\beta$ -Dibrom-3,4,6-Trioxyphenanthren. Sm. 122 bis 123° (B. 35, 4407 C. 1903 [1] 342; B. 35, 4411 C. 1903 [1] 343).
- $C_{17}H_{14}O_4N_2$  6) 4-Acetylbenzol-3-Akrylsäure. Sm. 167—169° (B. 37, 4126 C. 1904 [2] 1735).
- $C_{17}H_{14}O_4N_4$  2)  $s$ -[3-Nitrophenyl]imido- $\alpha$ -[3-Nitrophenyl]amido- $\alpha\gamma$ -Pentadiën. HBr (J. pr. [2] 70, 39 C. 1904 [2] 1235).
- 3)  $s$ -[4-Nitrophenyl]imido- $\alpha$ -[4-Nitrophenyl]amido- $\alpha\gamma$ -Pentadiën. HBr (J. pr. [2] 70, 28 C. 1904 [2] 1234).
- 4) Verbindung (aus 5-Keto-1-Phenyl-4,5-Dihydro-1,2,3-Triazol-4-Carbonsäure). Sm. 168° (A. 335, 91 C. 1904 [2] 1231).
- $C_{17}H_{14}O_4Br_2$  2) Diacetat d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan. Sm. 109° (A. 334, 384 C. 1904 [2] 1052).
- 3)  $\alpha$ -Benzozat d.  $\beta$ -Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3,4-Methylenäther. Sm. 142—143° (C. 1903 [1] 970).
- $C_{17}H_{14}O_4S$  1)  $\gamma$ -Keto- $\alpha s$ -Diphenyl- $\alpha\delta$ -Pentadiën- $\beta$ -Sulfonsäure. Sm. 140° u. Zers. Na + 4H<sub>2</sub>O (B. 36, 1493 C. 1903 [1] 1350).
- $C_{17}H_{14}O_5N_2$  3)  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Oxy-3-Diazoanhydrid-4-Methoxyphenyl]akrylsäure. Zers. bei 145° (B. 35, 4408 C. 1903 [1] 343). C 57,6 — H 4,0 — O 22,6 — N 15,8 — M. G. 354.
- $C_{17}H_{14}O_5N_4$  1) Amid d.  $\beta$ -Cyan- $\alpha\gamma$ -Di[4-Nitrophenyl]propan- $\beta$ -Carbonsäure. Sm. 230—231° (G. 32 [2] 360 C. 1903 [1] 629).
- $C_{17}H_{14}O_6N_2$  3) 2-Keto-5,6-Dioxy-1-[3-Nitro-4-Dimethylamidobenzyliden]-1,2-Dihydrobenzofuran. Sm. oberh. 250° (B. 37, 824 C. 1904 [1] 1152).
- $C_{17}H_{14}O_6N_2$  C 52,3 — H 3,6 — O 36,9 — N 7,2 — M. G. 390.
- 1) Di[4-Nitrobenzoat] d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 137° (A. 335, 285 C. 1904 [2] 1285).
- $C_{17}H_{14}N_2Cl_2$  1)  $s$ -[3-Chlorphenyl]imido- $\alpha$ -[3-Chlorphenyl]amido- $\alpha\gamma$ -Pentadiën. Sm. 109°. HCl (A. 336, 322 C. 1904 [2] 1149).
- 2)  $s$ -[4-Chlorphenyl]imido- $\alpha$ -[4-Chlorphenyl]amido- $\alpha\gamma$ -Pentadiën. Sm. 108—110° u. Zers. HCl (A. 333, 319 C. 1904 [2] 1149).
- $C_{17}H_{15}ON$  \*20) isom.  $\gamma$ -Oximido- $\alpha s$ -Diphenyl- $\alpha\delta$ -Pentadiën. Sm. 151° (55°) (C. 1903 [1] 399).
- \*24) 2-Oxy-1-[ $\alpha$ -Amidobenzyl]naphtalin. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), Pikrat (G. 33 [1] 2 C. 1903 [1] 924).
- 28) 4-Amidophenyl-[4-Oxy-1-Naphtyl]methan. Sm. 174—175°. HCl (M. 23, 982 C. 1903 [1] 288).
- 29) 7-Oxy-2-Aethyl-4-Phenylchinolin. Sm. 251° (B. 36, 4018 C. 1904 [1] 293).
- 30) Methyläther d. 4-[4-Oxybenzyl]isochinolin. Fl. (2HCl, PtCl<sub>4</sub>) (A. 326, 292 C. 1903 [1] 929).
- $C_{17}H_{15}ON_3$  14) 5-Amido-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 153°. HCl (B. 36, 525 C. 1903 [1] 641).
- 15) Monoacetylderivat d. 2-[ $\beta$ -2-Amidophenyläthenyl]benzimidazol. Sm. oberh. 285° (C. 1904 [1] 103).
- 16) Monoacetylderivat d. 2-[ $\beta$ -4-Amidophenyläthenyl]benzimidazol (C. 1904 [1] 103).
- $C_{17}H_{15}ON_5$  3)  $\alpha$ -Oximido-4,4'-Di[Methylcyanamidophenyl]methan. Sm. 173° (B. 37, 2674 C. 1904 [2] 443).
- $C_{17}H_{15}OCl$  1)  $s$ -Chlor- $\gamma$ -Keto- $\alpha s$ -Diphenyl- $\alpha$ -Penten. Sm. 84—95° (B. 36, 2375 C. 1903 [2] 495).
- 2) Hydrochlorid d. Dibenzalacetone (B. 37, 3288 C. 1904 [2] 1038).
- $C_{17}H_{15}OBr$  1) Hydrobromid d. Dibenzalacetone. Sm. 100° (B. 36, 3537 C. 1903 [2] 1368).
- 2) isom. Hydrobromid d. Dibenzalacetone. Sm. 119—121° (B. 37, 3365 C. 1904 [2] 1122).
- $C_{17}H_{15}OBr_3$  1)  $\alpha\beta s$ -Tribrom- $\gamma$ -Keto- $\alpha s$ -Diphenylpentan. Sm. 134—137° (B. 37, 3368 C. 1904 [2] 1123).
- $C_{17}H_{15}O_2N$  23) 2-Oxy-1-[ $\alpha$ -Amido-2-Oxybenzyl]naphtalin. HCl (G. 33 [1] 15 C. 1903 [1] 925).
- 24) Methylenäther d.  $\gamma$ -[2-Methylphenyl]imido- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 94—95° (B. 37, 1699 C. 1904 [1] 1497).

- $C_{17}H_{15}O_2N$  25) Methylenäther d.  $\gamma$ -[3-Methylphenyl]imido- $\alpha$ -[3,4-Dioxyphenyl]-propen. Sm. 95° (B. 37, 1699 C. 1904 [1] 1497).  
 26) Methylenäther d.  $\gamma$ -[4-Methylphenyl]imido- $\alpha$ -[3,4-Dioxyphenyl]-propen. Sm. 138° (B. 37, 1700 C. 1904 [1] 1497).  
 27) Äthyläther d. 4-Oxy-1-Keto-3-Phenyl-1,2-Dihydroisochinolin. Sm. 183° (B. 37, 1691 C. 1904 [1] 1524).  
 28) Imid d.  $\alpha\beta$ -Diphenylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 162—163° (B. 33, 2009). — \*II, 1098.  
 29) 4-Methylphenylimid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 138—139° (Soc. 85, 1367 C. 1904 [2] 1646).
- $C_{17}H_{15}O_2N_3$  20) 4-Oximido-5-Keto-3-Methyl-1-Diphenylmethyl-4,5-Dihydropyrazol. Sm. 182° u. Zers. +  $C_2H_6O$  (J. pr. [2] 67, 174 C. 1903 [1] 874).  
 21) Äthylester d. 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 134—135° (B. 35, 4048 C. 1903 [1] 169).
- $C_{17}H_{15}O_3N$  26)  $\gamma$ -Keto- $\gamma$ -[5-Acetylamido-2-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 190° (B. 37, 2826 C. 1904 [2] 704).  
 27) Dimethyläther d. 3-Phenyl-5-[3,5-Dioxyphenyl]isoxazol. Sm. 82° (83°) (B. 35, 3904 C. 1903 [1] 27; B. 36, 2301 C. 1903 [2] 577).  
 28) Phenylamidoformiat d. 1-[ $\alpha$ -Oxyäthyl]benzfuran. Sm. 126° (B. 36, 2869 C. 1903 [2] 833).
- $C_{17}H_{15}O_3N_5$  C 60,5 — H 4,4 — O 14,2 — N 20,8 — M. G. 337.  
 1) Amid d. Methyl-4-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amidophenylamidoessigsäure. Sm. 229° (B. 37, 2638 C. 1904 [2] 519).
- $C_{17}H_{15}O_3Cl$  \*1) Äthylester d.  $\alpha$ -Benzoyl- $\alpha$ -[4-Chlorphenyl]essigsäure. Sm. 91° (J. pr. [2] 67, 387 C. 1903 [1] 1357).
- $C_{17}H_{15}O_4N$  16) Äthyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]propen. Sm. 89—90° (Soc. 85, 463 C. 1904 [1] 1079, 1438).  
 17) 5,6-Dioxy-2-Keto-1-[4-Dimethylamidobenzyliden]-1,2-Dihydrobenzfuran. Sm. 203° (281°) (B. 29, 2434; B. 37, 823 C. 1904 [1] 1151). — \*III, 532.
- $C_{17}H_{15}O_4N_3$  3)  $\alpha$ -Acetylphenylhydrazid d. Phenylimidoessigsäure-2-Carbonsäure. Sm. 268° (A. 332, 238 C. 1904 [2] 38).
- $C_{17}H_{15}O_4N_5$  C 57,8 — H 4,2 — O 18,1 — N 19,8 — M. G. 353.  
 1)  $\epsilon$ -[2,4-Dinitrophenyl]imido- $\alpha$ -Phenylhydrazido- $\alpha\gamma$ -Pentadien. Sm. 140° u. Zers. (A. 333, 327 C. 1904 [2] 1150).
- $C_{17}H_{15}O_4Br$  1) Dimethyläther d. 3-Brom-7,8-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 110° (B. 36, 4243 C. 1904 [1] 382).  
 2)  $\alpha$ -Benzoat d.  $\alpha$ -Oxyäthyl-3-Brom-4-Oxyphenylketon-4-Methyläther. Sm. 116° (B. 37, 1548 C. 1904 [1] 1437).
- $C_{17}H_{15}O_5N$  10) 2<sup>3</sup>,6-Dimethyläther d. 3-Oximido-6-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 164—166° u. Zers. (B. 37, 2348 C. 1904 [2] 230).  
 11) 2<sup>5</sup>,6-Dimethyläther d. 3-Oximido-6-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 153—154° u. Zers. (B. 37, 958 C. 1904 [1] 1160).  
 12) 2<sup>4</sup>,6-Dimethyläther d. 3-Oximido-6-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 157—158° u. Zers. (B. 37, 783 C. 1904 [1] 1159).  
 13) 2<sup>3</sup>,7-Dimethyläther d. 3-Oximido-7-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 195° u. Zers. (B. 37, 4157 C. 1904 [2] 1658).  
 14) 2<sup>5</sup>,7-Dimethyläther d. 3-Oximido-7-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 160° u. Zers. (B. 37, 4160 C. 1904 [2] 1658).  
 15) 2<sup>4</sup>,7-Dimethyläther d. 3-Oximido-7-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 170° u. Zers. (B. 37, 4162 C. 1904 [2] 1659).  
 16) 5,7-Dimethyläther d. 3-Oximido-5,7-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 175—177° u. Zers. (B. 37, 2804 C. 1904 [2] 712).  
 17) 7,8-Dimethyläther d. 3-Oximido-7,8-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 166° u. Zers. (B. 37, 2807 C. 1904 [2] 713).
- $C_{17}H_{15}O_5N_3$  9) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitro-2-Oxybenzyliden]hydrazin. Sm. 156° (150°) (A. 305, 190; B. 37, 3913 C. 1904 [2] 1593; B. 37, 3931 C. 1904 [2] 1596).

- $C_{17}H_{15}O_5N_3$  10) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxybenzyliden]hydrazin. Sm. 166—167° (165—166°) (*A.* 305, 188; *B.* 37, 3913 *C.* 1904 [2] 1593; *B.* 37, 3931 *C.* 1904 [2] 1595).
- 11) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitro-4-Oxybenzyliden]hydrazin (*B.* 37, 3932 *C.* 1904 [2] 1596).
- $C_{17}H_{15}O_5Br$  2) 9-Brom-1,3,8-Tribrom-2,4,5,7-Tetramethylfluoron (*M.* 25, 681 *C.* 1904 [2] 1145).
- $C_{17}H_{15}O_6N$  5) Benzoylderivat d. Säure  $C_{10}H_{11}O_6N$ . Sm. 138° (*A.* 325, 338 *C.* 1903 [1] 771).
- $C_{17}H_{15}O_7N$  \*1) Papaverinsäuremethylbetain. ( $4 + 4HCl$ ,  $PtCl_4 + 8H_2O$ ), ( $HCl$ ,  $AuCl_3 + H_2O$ ) (*M.* 24, 693 *C.* 1903 [2] 1281; *M.* 24, 714 *C.* 1904 [1] 218).
- $C_{17}H_{15}N_3Cl_3$  1) Isochinolin +  $\beta\beta\gamma$ -Trichlor- $\alpha$ -Phenylamidopropan. +  $AuCl_3$  (*Ar.* 240, 706 *C.* 1903 [1] 403; *Ar.* 241, 120 *C.* 1903 [1] 1023).
- $C_{17}H_{15}N_4Cl$  2) 5-Chlor-4-[2-Methylphenyl]azo-3-Methyl-1-Phenylpyrazol. Sm. 97° (*D.R.P.* 153861 *C.* 1904 [2] 680).
- $C_{17}H_{16}ON_2$  17) 5-Keto-3-Aethyl-1,4-Diphenyl-4,5-Dihydropyrazol. Sm. 197° (*B.* 36, 2244 *C.* 1903 [2] 435).
- 18) 5-Keto-1-Diphenylmethyl-3-Methyl-4,5-Dihydropyrazol. Sm. 195° (*J. pr.* [2] 67, 173 *C.* 1903 [1] 874).
- 19) 3-Keto-2-[4-Dimethylamidobenzyliden]-2,3-Dihydroindol. Sm. 226 bis 227° (*C.* 1903 [1] 34).
- 20) 2-Acetylamo-3,7-Dimethylakridin. Sm. 258° (270°) (*B.* 36, 1026 *C.* 1903 [1] 1269; *Soc.* 85, 529 *C.* 1904 [1] 676, 1525).
- $C_{17}H_{16}ON_4$  4) 5-Keto-4-[2-Methylphenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 183° (*D.R.P.* 153861 *C.* 1904 [2] 680).
- 5) 5-Keto-4-[4-Methylphenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 136—137° (*Soc.* 83, 1124 *C.* 1903 [2] 23, 791).
- $C_{17}H_{16}OCl_2$  1) Dihydrochlorid d. Dibenzalaceton (*B.* 36, 1473 *C.* 1903 [1] 1348; *B.* 36, 2376 *C.* 1903 [2] 495; *B.* 36, 3543 *C.* 1903 [2] 1369; *B.* 37, 3290 *C.* 1904 [2] 1040).
- $C_{17}H_{16}OBr_2$  3) Dihydrobromid d. Dibenzalaceton (*B.* 36, 3539 *C.* 1903 [2] 1369).
- 4) isom. Dihydrobromid d. Dibenzalaceton. Sm. 124—126° u. Zers. (*B.* 36, 3541 *C.* 1903 [2] 1369; *B.* 37, 3364 *C.* 1904 [2] 1122).
- $C_{17}H_{16}O_2N_2$  29) 1-Methylamido-8-Dimethylamido-9,10-Anthrachinon (*D.R.P.* 144634 *C.* 1903 [2] 751).
- 30) Methyläther d. 4-Oxy-3-Keto-1-Methyl-2,5-Diphenyl-2,3-Dihydropyrazol. Sm. 155° (*B.* 36, 1137 *C.* 1903 [1] 1254).
- 31) Aethylester d. Azobenzol-4-Akrylsäure. Sm. 101—102° (*C. r.* 135, 1118 *C.* 1903 [1] 286).
- $C_{17}H_{16}O_2Br_2$  \*3) Benzoat d. 2,6-Dibrom-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 80 bis 81° (*M.* 24, 72 *C.* 1903 [1] 767).
- $C_{17}H_{16}O_3N_2$  24) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin. Sm. 148° (*B.* 36, 3975 *C.* 1904 [1] 163).
- 25) Di[Methylphenylamid] d. Mesoxalsäure. Sm. 172° (*Soc.* 83, 43 *C.* 1903 [1] 442).
- $C_{17}H_{16}O_3N_4$  9) Aethylester d.  $\beta$ -Phenylazo- $\beta$ -Phenylhydrazon- $\alpha$ -Ketoäthan- $\alpha$ -Carbonsäure. Sm. 144—145° (*Bl.* [3] 31, 96 *C.* 1904 [1] 581).
- $C_{17}H_{16}O_4N_2$  \*6)  $\alpha\beta$ -Di[Benzoylamido]propionsäure. Sm. 195° (*J. pr.* [2] 70, 181 *C.* 1904 [2] 1397).
- 15) Aethylester d.  $\alpha\beta$ -Dibenzoylhydrazin- $\alpha$ -Carbonsäure. Sm. 130° (*J. pr.* [2] 70, 276 *C.* 1904 [2] 1544).
- 16) Acetylderivat d. Verb.  $C_{15}H_{14}O_5N_2$ . Zers. oberh. 265° (*B.* 37, 371 *C.* 1904 [2] 1565).
- $C_{17}H_{16}O_4N_4$  3) 8-Nitro-1,4,5-Tri[Methylamido]-9,10-Anthrachinon (*D.R.P.* 144634 *C.* 1903 [2] 751).
- 4) 3,5-Diketo-1-Phenylhexahydro-1,2,4-Triazin-4-Phenylamidoessigsäure. Sm. 176° (*B.* 36, 3890 *C.* 1904 [1] 28).
- $C_{17}H_{16}O_4Br_2$  1) Verbindung (aus ?-Brom-8-Oxy-5,7-Dimethylfluoron). Sm. 99—100° (*M.* 25, 330 *C.* 1904 [1] 1495).
- $C_{17}H_{16}O_4S$  1) Cinnamylidenacetophenonhydrosulfonsäure. K (*B.* 37, 4053 *C.* 1904 [2] 1649).
- $C_{17}H_{16}O_5N_2$  13)  $\beta$ -Keto- $\alpha$ -Di[4-Nitrobenzyl]propan. Sm. 108,5—109,5° (*B.* 37, 1993 *C.* 1904 [2] 26).

- $C_{17}H_{16}O_5N_2$  14)  $\beta$ -Keto- $\alpha\gamma$ -Di[4-Nitrobenzyl]propan. Sm. 136—138° (B. 37, 1993 C. 1904 [2] 26).
- 15) Phenylmonamid d.  $\beta$ -[2-Nitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Fl. (B. 36, 2674 C. 1903 [2] 948).
- 16) Phenylmonamid d. Iso- $\beta$ -[2-Nitrophenyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 129° (B. 36, 2674 C. 1903 [2] 948).
- $C_{17}H_{16}O_5S$  1) Dibenzalacetonydrosulfat (B. 36, 1481 C. 1903 [1] 1349).
- $C_{17}H_{16}O_7N_2$  1) Diäthyläther d. 3,3'-Dinitro-4,4'-Dioxydiphenylketon. Sm. 132° (G. 34 [1] 384 C. 1904 [2] 111).
- 2) 3-[6-Oxy-3-Methylcarboxyphenylamid] d. 4-Oxybenzol-1-Carbonsäure-3-Amidoessigsäure? Sm. noch nicht bei 280° (A. 325, 334 C. 1903 [1] 771).
- $C_{17}H_{16}O_9N_6$  C 45,5 — H 3,6 — O 32,1 — N 18,8 — M. G. 448.
- 1) 3,5,3',5'-Tetranitro-4,4'-Di[Dimethylamido]diphenylketon. Sm. 202° (G. 34 [1] 383 C. 1904 [2] 111).
- $C_{17}H_{16}NJ$  5) Jodmethylat d. 2-Benzylchinolin. Zers. bei 220° (B. 37, 3400 C. 1904 [2] 1318).
- 6) Jodmethylat d. 1-Benzylisochinolin. Sm. 247—248° (B. 37, 3398 C. 1904 [2] 1317).
- 7) Jodmethylat d. 4-Benzylisochinolin. Sm. 188° (A. 326, 295 C. 1903 [1] 929).
- 8) Jodmethylat d. Base  $C_{16}H_{15}N$  (aus Morphin) (B. 34, 1163). — \*III, 668.
- $C_{17}H_{16}N_2S$  3) Benzyläther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sd. 246°<sub>20</sub> (A. 331, 237 C. 1904 [1] 1221).
- $C_{17}H_{17}ON$  \*17) d-1-neo-1-Benzoylamido-2-Methyl-2,3-Dihydroinden. Sm. 169° (Soc. 83, 917 C. 1903 [2] 505; Soc. 83, 928 C. 1903 [2] 505).
- 25)  $\gamma$ -Benzoylamido- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 136—137° (B. 36, 3002 C. 1903 [2] 949).
- 26) d-1-1-Benzoylamido-2-Methyl-2,3-Dihydroinden. Sm. 151° (Soc. 83, 917 C. 1903 [2] 505; Soc. 83, 927 C. 1903 [2] 505).
- 27)  $\gamma$ -Oximido- $\alpha$ s-Diphenyl- $\alpha$ -Penten. Sm. 95—105° (A. 330, 234 C. 1904 [1] 945).
- 28) Methyläther d. 3,5-Dimethyl-2-[4-Oxyphenyl]indol. Sm. 134° (B. 37, 871 C. 1904 [1] 1154).
- 29) Methyläther d. 3,7-Dimethyl-2-[4-Oxyphenyl]indol. Sm. 127° (B. 37, 870 C. 1904 [1] 1154).
- 30) 2-Benzoylmethyl-1,2,3,4-Tetrahydroisochinolin. Sm. 100—101° (B. 36, 1161 C. 1903 [1] 1186).
- 31) 4-Methylphenylamid d. Phenylisocrotonsäure. Sm. 149° (B. 37, 2001 C. 1904 [2] 24).
- $C_{17}H_{17}ON_3$  8)  $\gamma$ -Phenylsemicarbazon- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 195° (B. 37, 3183 C. 1904 [2] 991).
- $C_{17}H_{17}O_2N$  \*21) Apomorphin. +  $(C_2H_5)_2O$  (B. 35, 4383 C. 1903 [1] 337; C. 1903 [2] 1449).
- 41)  $\gamma$ -[3-Oxyphenyl]imido- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Penten. Sm. 139° (B. 36, 4018 C. 1904 [1] 293).
- 42) 4-Propionylamido-3-Methyldiphenylketon. Sm. 128° (Soc. 85, 593 C. 1904 [1] 1554).
- 43) 6-Propionylamido-3-Methyldiphenylketon. Sm. 99° (Soc. 85, 596 C. 1904 [1] 1554).
- 44) Benzoylphenylamid d. Isobuttersäure. Sm. 83° (Bl. [3] 31, 626 C. 1904 [2] 98).
- $C_{17}H_{17}O_2N_3$  10)  $\gamma$ -Phenylsemicarbazon- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Buten +  $H_2O$ . Sm. 183 bis 184° u. Zers. (B. 37, 3184 C. 1904 [2] 991).
- 11) Benzylidenhydrazid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 194° (J. pr. [2] 70, 143 C. 1904 [2] 1394).
- $C_{17}H_{17}O_2N_5$  C 63,2 — H 5,2 — O 9,9 — N 21,7 — M. G. 323.
- 1) 4-Phenylhydroxylamidoazo-3-Keto-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazol. Sm. 105° u. Zers. (A. 328, 70 C. 1903 [2] 249).
- $C_{17}H_{17}O_3N$  40) Methylenäther d. 6-Benzoylamido-3,4-Dioxy-1-Propylbenzol. Sm. 151° (Ar. 242, 89 C. 1904 [1] 1007).
- 41) 6-Aethyläther d. 4-Oximido-6-Oxy-2-Phenyl-2,3-Dihydrobenzopyran. Sm. 185—186° (B. 33, 1484). — \*III, 559.

- $C_{17}H_{17}O_3N$  42) Aethylester d. 4-Benzoyl-2-Methylphenylamidoameisensäure. Sm. 88° (*Soc.* 85, 594 *C.* 1904 [1] 1554).  
 43) Aethylester d. 2-Benzoyl-4-Methylphenylamidoameisensäure. Sm. 58° (*Soc.* 85, 596 *C.* 1904 [1] 1554).  
 44) Phenylamidoformiat d. 1-[ $\alpha$ -Oxyäthyl]-1, 2-Dihydrobenzofuran. Sm. 73° (*B.* 36, 2871 *C.* 1903 [2] 833).
- $C_{17}H_{17}O_3N_3$  6) d- $\gamma$ -Semicarbazon- $\alpha\gamma$ -Diphenylbuttersäure. Sm. 107—110° (*Soc.* 85, 1369 *C.* 1904 [2] 1647).  
 7) i- $\gamma$ -Semicarbazon- $\alpha\gamma$ -Diphenylbuttersäure. Sm. 189—191° (*Soc.* 85, 1364 *C.* 1904 [2] 1646).  
 8) Phenylamid d. Benzoylamidoacetylamidoessigsäure. Sm. 238—240° (*J. pr.* [2] 70, 80 *C.* 1904 [2] 1033).  
 9) Di[Methylphenylamid] d. Oximidomalonsäure. Sm. 109°. +  $CH_4O$  (*Soc.* 83, 42 *C.* 1903 [1] 442).  
 10) isom. Di[Methylphenylamid] d. Oximidomalonsäure. Sm. 192° (*Soc.* 83, 43 *C.* 1903 [1] 442; *C.* 1904 [1] 1555).  
 11) Di[2-Methylphenylamid] d. Oximidomalonsäure. Sm. 111°. K (*Soc.* 83, 39 *C.* 1903 [1] 441).  
 12) Di[4-Methylphenylamid] d. Oximidomalonsäure. Sm. 170—171°. K, Ag (*Soc.* 83, 36 *C.* 1903 [1] 73, 441).  
 13)  $\alpha$ -Phenylhydrazid d. Phenylimidoessigsäure-2-Carbonsäureäthylester. Sm. 140—141° u. Zers. (*A.* 332, 236 *C.* 1904 [2] 38).  
 14) Benzoylhydrazid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 180—184° (*J. pr.* [2] 70, 144 *C.* 1904 [2] 1394).
- $C_{17}H_{17}O_4N$  \*14) 4-Aethoxylphenylamid d. 2-Acetoxybenzol-1-Carbonsäure. Sm. 132° (*B.* 37, 3976 *C.* 1904 [2] 1605).  
 25) Aethyläther d.  $\beta$ -Nitro- $\gamma$ -Keto- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropan. Sm. 119° (*A.* 328, 240 *C.* 1903 [2] 999).  
 26) Benzoylepinephrin.  $H_2SO_4$ , Pikrat (*H.* 28, 318; 29, 105; *B.* 36, 1839). — \*III, 667.  
 27) Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthan. Sm. 36—37° (*B.* 36, 121 *C.* 1903 [1] 470).
- $C_{17}H_{17}O_4N_3$  5) Aethylester d.  $\alpha$ -Phenyl- $\beta$ -[3-Nitrobenzyliden]hydrazidoessigsäure. Sm. 86° (*B.* 36, 3884 *C.* 1904 [1] 27).  
 6) Di[Methylphenylamid] d. Nitromalonsäure. Sm. 156° u. Zers. (*C.* 1904 [1] 1555).
- $C_{17}H_{17}O_5N$  12) Dimethyläther d.  $\gamma$ -Keto- $\alpha\alpha$ -Dioxy- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]-propan. Sm. 91° (*B.* 37, 1150 *C.* 1904 [1] 1267).  
 13) Trimethyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[2-Nitro-3,4-Dioxyphenyl]-äthen. Sm. 156° (*B.* 35, 4404 *C.* 1903 [1] 342).  
 14)  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Amido-3-Oxy-4-Methoxyphenyl]akrylsäure. Sm. 150—152° (*B.* 35, 4408 *C.* 1903 [1] 342).
- $C_{17}H_{17}O_5N_5$  C 55,0 — H 4,6 — O 21,5 — N 18,9 — M. G. 371.  
 1) Amid d. 1-[Methyl- $\alpha$ -Carboxyäthylamido]-4-[2,4-Dinitrobenzyliden]amidobenzol. Sm. 235—238° (*B.* 36, 763 *C.* 1903 [1] 963).
- $C_{17}H_{17}N_2Br$  4) Bromphenylat d. 2-Phenylamido-1,2-Dihydropyridin. Sm. 162° (*J. pr.* [2] 69, 109, 123 *C.* 1904 [1] 814).
- $C_{17}H_{15}O_3N_3$  \*11) 3, 6 - Di[Dimethylamido]xanthon. Sm. 240°. (2HCl, PtCl<sub>4</sub>) (*B.* 37, 204 *C.* 1904 [1] 664).  
 \*23) Di[4-Methylphenylamid] d. Malonsäure. Sm. 250° (*Soc.* 83, 36 *C.* 1903 [1] 441).  
 \*38) Aethyläther d. Benzoylimido-4-Methylphenyloxymethan. Sm. 77 bis 78° (*Am.* 32, 367 *C.* 1904 [2] 1507).  
 \*39)  $\alpha$ -Acetyl- $\alpha\beta$ -Di[4-Methylphenyl]harnstoff. Sm. 148° (*B.* 37, 3119 *C.* 1904 [2] 1317).  
 \*40)  $\alpha\beta$ -Dibenzoyl- $\alpha$ -Propylhydrazin. Sm. 131° (*J. pr.* [2] 70, 279 *C.* 1904 [2] 1545).  
 43) Di[4-Acetylphenylamido]methan. Sm. 188° (*B.* 37, 397 *C.* 1904 [1] 658).  
 44) Dioxim d. Dimethylphenyl-*m*-Biszyklohexanon. Sm. 103—105° (*B.* 36, 2146 *C.* 1903 [2] 369).  
 45) isom. Dioxim d. Dimethylphenyl-*m*-Biszyklohexanon. Sm. 190 bis 193° (*B.* 36, 2147 *C.* 1903 [2] 369).

- $C_{17}H_{18}O_2N_2$  46)  $\alpha\beta$ -Diacetyl- $\alpha$ -Diphenylmethylhydrazin. Sm. 197—198° (*J. pr.* [2] 67, 169 *C.* 1903 [1] 873).  
 47)  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[Methyl-4-Methylphenyl]amidoessigsäure. Zers. bei 80—81° (*Soc.* 85, 997 *C.* 1904 [2] 321, 831).  
 48) Methylester d. 4-Methylphenylimido-4-Methylphenylamidoessigsäure. Sm. 103°. (2HCl, PtCl<sub>4</sub>) (*Soc.* 85, 994 *C.* 1904 [2] 831).  
 49) Methylester d. 2-[ $\alpha$ -Dimethylamidobenzyliden]amidobenzol-1-Carbonsäure. Sm. 109°. Pikrat (*B.* 37, 2681 *C.* 1904 [2] 521).  
 50) 4-Methylphenylamid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 172 bis 175° (*J. pr.* [2] 70, 147 *C.* 1904 [2] 1394).  
 51) Di[2-Methylphenylamid] d. Malonsäure. Sm. 193° (*Soc.* 83, 39 *C.* 1903 [1] 441).
- $C_{17}H_{18}O_2N_4$  10)  $\alpha$ -Semicarbazido- $\gamma$ -[3-Oxyphenyl]imido- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 124° (*B.* 36, 2452 *C.* 1903 [2] 670).
- $C_{17}H_{18}O_2Br_2$  2) 3, 3'-Dibrom-4, 4'-Dioxy-2, 5, 2', 5'-Tetramethyldiphenylmethan. Sm. 152—153° (*B.* 36, 1890 *C.* 1903 [2] 291; *B.* 37, 1471 *C.* 1904 [1] 1518).
- $C_{17}H_{18}O_2S_2$  2)  $\alpha\alpha$ -Dimerkaptopropiondibenzyläthersäure. Sm. 98—100° (*B.* 36, 299 *C.* 1903 [1] 499).
- $C_{17}H_{18}O_8N_2$  17) Methyläther d. 4, 4'-Di[Acetylamido]-2-Oxybiphenyl. Sm. 285° (*B.* 36, 4079 *C.* 1904 [1] 268).  
 18) Aethyläther d. N-Formyl-4'-Formylamido-4-Oxy-2-Methyldiphenylamin. Sm. 140° (*B.* 36, 3800 *C.* 1904 [1] 91).  
 19) 4-Methyläther- $\alpha$ -Aethyläther d.  $\alpha$ -Benzoylimido- $\alpha$ -[3-Oxyphenyl]-amido- $\alpha$ -Oxymethan. Sm. 66—67° (*Am.* 32, 367 *C.* 1904 [2] 1507).  
 20) Phenylamid d.  $\alpha$ -Phenylamidoformoxylbuttersäure. Sm. 153—154° (*Bl.* [3] 29, 126 *C.* 1903 [1] 564).  
 21) Phenylamid d.  $\alpha$ -Phenylamidoformoxylisobuttersäure. Sm. 155 bis 156° (*Bl.* [3] 29, 127 *C.* 1903 [1] 564).
- $C_{17}H_{18}O_8N_4$  5)  $\alpha$ -[3-Nitrobenzyliden]amido- $\beta$ -Aethyl- $\alpha$ -Benzylharnstoff. Sm. 106° (*B.* 37, 2326 *C.* 1904 [2] 312).  
 6) s-Di[2-Methylphenylamidoformyl]harnstoff. Sm. 190° (*Soc.* 81, 1571 *C.* 1903 [1] 158).
- $C_{17}H_{18}O_8S$  2)  $\alpha$ -[4-Methylphenyl]sulfon- $\gamma$ -Keto- $\alpha$ -Phenylbutan (*Am.* 31, 178 *C.* 1904 [1] 876). — \*III, 119.
- $C_{17}H_{18}O_4N_2$  26) Dimethyläther d. Di[4-Oxybenzoylamido]methan. Sm. 206—207,5 (*B.* 37, 4099 *C.* 1904 [2] 1726).  
 27) Propyl-2, 4, 6-Trioxo-5-Phenylazo-3-Methylphenylketon. Sm. 182° (*A.* 329, 339 *C.* 1904 [1] 801).  
 28) Methylester d.  $\beta$ -Nitro- $\gamma$ -Phenylamido- $\gamma$ -Phenylbuttersäure. Sm. 122° (*A.* 329, 254 *C.* 1904 [1] 31).  
 29) Di[Methylphenylamid] d. Dioxymalonsäure. Sm. 184° (*C.* 1904 [1] 1555).
- $C_{17}H_{18}O_4N_4$  3)  $\alpha\beta$ -Di[ $\beta$ -Phenylureido]propionsäure. Sm. 214° u. Zers. (*B.* 37, 344 *C.* 1904 [1] 646).
- $C_{17}H_{18}O_4S$  2) Methylester d.  $\beta$ -[4-Methylphenyl]sulfon- $\beta$ -Phenylpropionsäure. Sm. 156° (*Am.* 31, 173 *C.* 1904 [1] 876).  
 3) Aethylester d.  $\beta$ -Phenylsulfon- $\beta$ -Phenylpropionsäure. Sm. 139° (*Am.* 31, 174 *C.* 1904 [1] 876).
- $C_{17}H_{18}O_6N_2$  5) Verbindung (aus Oximidocampher u. 3-Nitrobenzoylchlorid). Sm. 136 bis 137° (*Soc.* 83, 533 *C.* 1903 [1] 1136, 1353).  
 6) isom. Verbindung (aus Oximidocampher u. 3-Nitrobenzoylchlorid). Sm. 152° (*Soc.* 83, 534 *C.* 1903 [1] 1136, 1353).
- $C_{17}H_{18}O_6N_4$  5) 3, 3'-Dinitro-4, 4'-Di[Dimethylamido]diphenylketon. Sm. 150° (*G.* 34 [1] 386 *C.* 1904 [2] 111).  
 6) Diphenylcarbaziiddiessigsäure. Sm. 235° u. Zers. (*B.* 36, 3889 *C.* 1904 [1] 28).
- $C_{17}H_{18}O_6N_2$  \*4)  $\alpha$ -Nitro- $\alpha$ -[3-Nitrobenzoyl]campher. Sm. 175° u. Zers. (*Soc.* 83, 541 *C.* 1903 [1] 1354).  
 5)  $\alpha$ -Nitro- $\alpha$ '-[3-Nitrobenzoyl]campher. Sm. 112—113° (*Soc.* 83, 541 *C.* 1903 [1] 1354).
- $C_{17}H_{18}O_7S_2$  2) Dibenzylidenacetonbischydrosulfonsäure.  $K_2 + 3\frac{1}{2}H_2O$  (*B.* 37, 4054 *C.* 1904 [2] 1649).

- $C_{17}H_{18}NCl$  1) Chloräthylat d. d-2-Propyl-1-Benzylhexahydropyridin (Ch. d. N-Benzyleonin). 2 +  $PtCl_4$  (B. 37, 3632 C. 1904 [2] 1510).  
 2) isom. Chloräthylat d. d-2-Propyl-1-Benzylhexahydropyridin. 2 +  $PtCl_4$  (B. 37, 3632 C. 1904 [2] 1510).
- $C_{17}H_{18}NJ$  2) Jodmethylat d. 9-Dimethylamidophenanthren. Sm. 217° u. Zers. (B. 36, 2516 C. 1903 [2] 507).
- $C_{17}H_{18}N_3Cl$  2) Chlormethylat d. 5-Phenylamido-3-Methyl-1-Phenylpyrazol. 2 +  $PtCl_4$ , +  $AuCl_3$  (B. 36, 3276 C. 1903 [2] 1189).
- $C_{17}H_{18}N_3J$  2) Jodmethylat d. 5-Phenylamido-3-Methyl-1-Phenylpyrazol. Sm. 174° (B. 34, 726; B. 36, 3276 C. 1903 [2] 1189).
- $C_{17}H_{19}ON$  29)  $\gamma$ -Benzoylamidobutylbenzol. Sm. 108° (B. 36, 3000 C. 1903 [2] 949).  
 30) Methylphenylamid d. dl- $\beta$ -Phenylisobuttersäure. Sm. 54–55° (Soc. 85, 445 C. 1904 [1] 1445).  
 31) 4-Methylphenylamid d. dl- $\beta$ -Phenylisobuttersäure. Sm. 130° (Soc. 85, 445 C. 1904 [1] 1445).  
 32) 4-Methylphenylamid d. d- $\beta$ -Phenylisobuttersäure. Sm. 115–116° (Soc. 85, 446 C. 1904 [1] 1445).  
 33)  $\alpha$ -Phenyläthylamid d.  $\beta$ -Phenylpropionsäure. Sm. 89° (B. 37, 2704 C. 1904 [2] 518).
- $C_{17}H_{19}ON_3$  8) Methylhydroxyd d. 5-Phenylamido-3-Methyl-1-Phenylpyrazol. Salze siehe (B. 36, 3276 C. 1903 [2] 1189).
- $C_{17}H_{19}OCl$  1)  $\alpha$ -Chlorbenzylidencampher. Sm. 100° (Soc. 83, 104 C. 1903 [1] 233, 458).
- $C_{17}H_{19}OBr$  \*2) d-2-Brombenzylidencampher. Sm. 105° (C. r. 136, 71 C. 1903 [1] 459).  
 \*3) d-4-Brombenzylidencampher. Sm. 129–130° (C. r. 136, 71 C. 1903 [1] 459).  
 4) i- $\alpha$ -Brombenzylidencampher. Sm. 56° (C. r. 132, 1574). — \*III, 388.
- $C_{17}H_{19}O_2N$  \*19) Äthylester d. Dibenzylamidoameisensäure. Sd. 216°<sub>23</sub> (B. 36, 2288 C. 1903 [2] 563).  
 43) Äthyläther d. 4-Dimethylamido-3'-Oxydiphenylketon. Sm. 90° (D. R. P. 65952). — \*III, 153.  
 44) Phenylamidoformiat d.  $\gamma$ -Oxy- $\alpha$ -Phenylbutan. Sm. 113° (B. 37, 2314 C. 1904 [2] 217).  
 45) Phenylamidoformiat d.  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Methylpropan. Sm. 96° (B. 37, 1723 C. 1904 [1] 1515).
- $C_{17}H_{19}O_2N_3$  11) Phenylamid d. 4-Oxy-5-Isopropyl-2-Methylphenylazoameisensäure. Sm. 179–180° u. Zers. (A. 334, 194 C. 1904 [2] 835).  
 12) Di[Methylphenylamid] d. Amidomalonsäure. Sm. 108° (C. 1904 [1] 1555).  
 13) Verbindung (aus d. isom. Di[Methylphenylamid] d. Oximidomalonsäure oder  $C_{17}H_{19}O_2N_3$ ). Sm. 185–186° (C. 1904 [1] 1555).  
 C 62,8 — H 5,8 — O 9,8 — N 21,5 — M. G. 325.
- $C_{17}H_{19}O_2N_5$  1)  $\beta$ -Methyl- $\alpha$ -Phenylhydrazid d.  $\alpha$ -Oximido- $\beta$ -Phenylhydrazonbuttersäure. Sm. 210° (A. 328, 69 C. 1903 [2] 249).
- $C_{17}H_{19}O_2J$  \*1)  $\alpha$ -Jod- $\alpha'$ -Benzoylcampher (Soc. 83, 542 C. 1903 [1] 1354).
- $C_{17}H_{19}O_3N$  \*9) Morphin. Ditartrat (C. 1903 [1] 525).  
 \*15) 4-Naphtylmonamid d. mal. Pentan- $\beta\beta$ -Dicarbonsäure. Sm. 151 bis 152° (Bl. [3] 29, 1019 C. 1903 [2] 1315).  
 33) l-Aethyläther d. 4-[Acetyl-2-Oxybenzyl]amido-1-Oxybenzol. Sm. 101° (Ar. 240, 683 C. 1903 [1] 395).  
 34)  $\gamma$ -Phenylamidoformiat d.  $\gamma$ -Oxy- $\alpha$ -[2-Oxyphenyl]butan. Sm. 90° (B. 36, 2872 C. 1903 [2] 833).  
 35)  $\alpha$ -Phenylamidoformiat d. 4-Oxy-1-[ $\alpha$ -Oxyäthyl]benzol-4-Aethyläther. Sm. 81° (B. 36, 3594 C. 1903 [2] 1366).  
 36) Methylphenylamidoformiat d. 3,4-Dioxy-1-Propylbenzol. Sm. 110° (C. r. 138, 425 C. 1904 [1] 798).
- $C_{17}H_{19}O_3N_3$  9) Äthylester d.  $\alpha\gamma$ -Diphenylsemicarbazidoessigsäure. Sm. 160° (B. 36, 3886 C. 1904 [1] 27).  
 C 59,8 — H 5,6 — O 14,1 — N 20,5 — M. G. 341.
- $C_{17}H_{19}O_3N_5$  1) Phenylamid d.  $\beta$ -Phenylureidoacetylamidomethylamidoameisensäure. Sm. 222° u. Zers. (J. pr. [2] 70, 258 C. 1904 [2] 1464).  
 2) Phenylhydrazid d.  $\beta$ -Phenylureidoacetylamidoessigsäure. Sm. 139° u. Zers. (J. pr. [2] 70, 257 C. 1904 [2] 1464).

- $C_{17}H_{19}O_4N$  \*6)  $\alpha'$ -Nitro- $\alpha'$ -Benzoylcampher. Sm. 225° (Soc. 83, 539 C. 1903 [1] 1354).  
 9)  $\alpha$ -Nitro- $\alpha'$ -Benzoylcampher. Sm. 110° (Soc. 83, 539 C. 1903 [1] 1354).  
 10) Aethylester d. 2-Keto-5-Acetyl-4-Methyl-6-Phenyl-1,2,3,4-Tetrahydropyridin-3-Carbonsäure. Sm. 156° (B. 36, 2189 C. 1903 [2] 569).
- $C_{17}H_{19}O_4N_3$  3) Verbindung (aus d.  $\gamma$ -d-Campherdioximmonbenzoat). Sm. 112° (Soc. 85, 912 C. 1904 [2] 598).
- $C_{17}H_{19}O_6N$  3) Diäthylester d.  $\delta$ -Keto- $\delta$ -Phenyl- $\beta$ -Buten- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 137° (Soc. 75, 785). — \*II, 1200.
- $C_{17}H_{19}N_3S_2$  1) Methyläther d.  $\alpha$ -Phenylamidothioformylimido- $\alpha$ -[Methyl-4-Methylphenyl]amido- $\alpha$ -Merkaptomethan. Sm. 124°. HJ (Am. 30, 175 C. 1903 [2] 872).  
 2) Methyläther d.  $\alpha$ -[ $\beta$ -2-Methylphenylthioureido]- $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Merkaptomethan. Sm. 122—123° (Am. 30, 182 C. 1903 [2] 873).  
 3) Aethyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Merkaptomethan. Sm. 117—118° (Am. 30, 180 C. 1903 [2] 873).  
 4) Aethyläther d.  $\alpha$ -[ $\beta$ -2-Methylphenylthioureido]- $\alpha$ -Phenylimido- $\alpha$ -Merkaptomethan. Sm. 95—96° (Am. 30, 181 C. 1903 [2] 873).  
 5) Dimethyläther d. Phenylimidomerkaptomethyl-2-Methylphenylimidomerkaptomethylamin. Sm. 147—148° (Am. 30, 179 C. 1903 [2] 872).  
 6) Dimethyläther d. Phenylimidomerkaptomethyl-4-Methylphenylimidomerkaptomethylamin. Fl. HJ (Am. 30, 174 C. 1903 [2] 872).
- $C_{17}H_{20}ON_2$  \*7) s-Di[2,4-Dimethylphenyl]harnstoff. Sm. 260—262° (M. 25, 381 C. 1904 [2] 320).  
 \*24) 3,6-Di[Dimethylamido]xanthen. Sm. 113°. 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 37, 204 C. 1904 [1] 665; B. 37, 3620 C. 1904 [2] 1503).  
 \*36) Di[4-Methylamido-3-Methylphenyl]keton. 2HCl (C. 1903 [1] 399).  
 39) Aethylbenzyl-1-Acetylamidophenylamin. Sm. 111° (A. 334, 263 C. 1904 [2] 902).  
 40)  $\beta$ -Benzoyl- $\alpha\beta$ -Diphenyl- $\alpha$ -Phenylhydrazin. Sm. 59—60° (B. 35, 4186 C. 1903 [1] 143).  
 41)  $\beta$ -Benzoyl- $\alpha\beta$ -Diäthyl- $\alpha$ -Phenylhydrazin. Sm. 60° (C. 1903 [1] 1128).
- $C_{17}H_{20}OBr_2$  2)  $\alpha$ ,4-Dibrombenzylcampher (C. r. 136, 72 C. 1903 [1] 459).  
 3) 2-Brombenzylbromcampher. Fl. (C. r. 136, 71 C. 1903 [1] 459).  
 4) 4-Brombenzylbromcampher. Fl. (C. r. 136, 71 C. 1903 [1] 459).
- $C_{17}H_{20}O_2N_2$  22) 3,6-Di[Dimethylamido]-9-Oxyxanthen? Chlorid + H<sub>2</sub>O, 2 Chlorid + PtCl<sub>4</sub> (D. I. P. 60505; J. pr. [2] 54, 232). — \*III, 569.  
 23) Acetat d.  $\alpha$ -Oxydi[4-Amido-3-Methylphenyl]methan. Sm. 153° (C. 1903 [2] 442).
- $C_{17}H_{20}O_2S$  2) Benzoat d.  $\beta$ -Merkaptocampher. Sm. 59° (Soc. 83, 483 C. 1903 [1] 923, 1137).
- $C_{17}H_{20}O_3N_2$  10) 4'-Diäthylamido-4-Oxydiphenylamin-3-Carbonsäure. Sm. 175 bis 177° (D.R.P. 140733 C. 1903 [1] 1011).  
 11) Monobenzoat d.  $\gamma$ -d-Campherdioxim. Sm. 172° u. Zers. (Soc. 85, 911 C. 1904 [2] 598).
- $C_{17}H_{20}O_3N_4$  13)  $\alpha\gamma$ -Di[4-Methylphenylnitrosamido]- $\beta$ -Oxypropan. Sm. 223° (B. 37, 3035 C. 1904 [2] 1213).
- $C_{17}H_{20}O_4N_2$  \*5) Diphenylhydrazon d. 1-Arabinose. Sm. 204—205° (B. 37, 312 C. 1904 [1] 650).
- $C_{17}H_{20}O_4N_4$  \*1) Di[2-Nitro-4-Dimethylamidophenyl]methan (D.R.P. 139989 C. 1903 [1] 798).  
 7) Di[4-Nitrophenylamido]- $\beta$ -Methylbutan. Sm. 158° (A. 328, 130 C. 1903 [2] 790).
- $C_{17}H_{20}O_5S_2$  9)  $\beta\beta$ -Di[Benzylsulfon]propan. Sm. 153° (B. 36, 299 C. 1903 [1] 499).
- $C_{17}H_{20}O_5N_2$  6) Aethylester d. Anhydrocotarninecyanessigsäure. Sm. 95—96° u. Zers. (2HCl, PtCl<sub>4</sub>) (B. 37, 2747 C. 1904 [2] 545).
- $C_{17}H_{20}O_6N_4$  2) 5-Dimethylamido-1,2,4-Trimethylbenzol + 1,3,5-Trinitrobenzol (Soc. 85, 239 C. 1904 [1] 1006).
- $C_{17}H_{20}NJ$  \*1)  $\alpha$ -Methylallylphenylbenzylammoniumjodid (Ph. Ch. 45, 236 C. 1903 [2] 979).  
 \*4) d- $\alpha$ -Methylallylphenylbenzylammoniumjodid (B. 37, 2725 C. 1904 [2] 592).

- $C_{17}H_{21}ON$  \*1) Phenylamidomethylencampher (*C. r.* 136, 1223 *C.* 1903 [2] 116).  
 19) 4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 153 bis 155° (*A.* 334, 337 *C.* 1904 [2] 989).  
 20) Benzyliden- $\alpha$ -Anhydropulegonhydroxylamin. Sm. 105—106°. Pikrat (*B.* 37, 2284 *C.* 1904 [2] 441).  
 21) Base (aus  $\alpha$ -Oxybenzylidencampher). Sm. 118—119°. Pikrat (*Soc.* 83, 108 *C.* 1903 [1] 233, 458).  
 22) Base (aus  $\alpha$ -Chlorbenzylidencampher). Sm. 170°. Pikrat (*Soc.* 83, 107 *C.* 1903 [1] 233, 458).
- $C_{17}H_{21}ON_3$  7) 4-Phenylsemicarbazon-5-Methyl-2-Isopropyl-1,2,3,4-Tetrahydrobenzol (d-Carvonphenylcarbaminsäurehydrazon). Sm. 176—177° (*B.* 37, 3183 *C.* 1904 [2] 991).
- $C_{17}H_{21}OBr$  \*3) d-Benzylbromcampher. *Sd.* 94—95° (*C. r.* 136, 69 *C.* 1903 [1] 459).  
 \*4) isom. d-Benzylbromcampher. Sm. 91—92° (*C. r.* 136, 70 *C.* 1903 [1] 459).  
 5) r-Benzylbromcampher. Sm. 112° (*C. r.* 132, 1574). — \*III, 389.  
 \*6) Benzoylamidocampher. Sm. 132° (*Soc.* 85, 895 *C.* 1904 [2] 331, 596).
- $C_{17}H_{21}O_2N$  \*2) 2-Nitro-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 96—96,5° (*D.R.P.* 139989 *C.* 1903 [1] 798).  
 \*2) 2-Nitro-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 96—96,5° (*D.R.P.* 139989 *C.* 1903 [1] 798).
- $C_{17}H_{21}O_3N$  5) Acetylparasantonimid. Sm. 169—170° (*C.* 1903 [2] 1067).  
 \*20) r-Cocain. *HCl*, (*HCl*, *AuCl\_3* + 2*H\_2O*), *HNO\_3* (*A.* 326, 71 *C.* 1903 [1] 841).  
 22) Acetylderivat d. Parasantoninoximid. Sm. 176° (*C.* 1903 [2] 1377).
- $C_{17}H_{21}O_5N$  \*5) Diäthylester d. 4-[2-Furanyl]-2,6-Dimethyl-1,4-Dihydropyridin-3,5-Dicarbonsäure (D. d. Hydrofuryldicarbolutidinsäure). Sm. 164° (*Soc.* 83, 378 *C.* 1903 [1] 845, 1144).  
 7) Pentamethyläther d. Pentaoxydiphenylamin. Sm. 131—133° (*Ar.* 242, 512 *C.* 1904 [2] 1387).  
 8) Anhydrocotarninacetylaceton. Sm. 98—99°. *HCl*, (2 *HCl*, *PtCl\_4*) (*B.* 37, 2745 *C.* 1904 [2] 545).
- $C_{17}H_{21}O_5P$  \*1)  $\beta\beta'$ -Di[4-Methylphenoxy]isopropylphosphorigesäure. Anilinsalz, p-Toluidinsalz (*Soc.* 83, 1141 *C.* 1903 [2] 1059).  
 2)  $\beta\beta'$ -Di[2-Methylphenoxy]isopropylphosphorigesäure. Sm. 88—89°. *Ca* + 4*H\_2O*, Anilinsalz, p-Toluidinsalz (*Soc.* 83, 1138 *C.* 1903 [2] 1059).  
 3)  $\beta\beta'$ -Di[3-Methylphenoxy]isopropylphosphorigesäure. Sm. 85—87°. Anilinsalz, p-Toluidinsalz (*Soc.* 83, 1140 *C.* 1903 [2] 1059).  
*C* 50,1 — *H* 5,2 — *O* 27,5 — *N* 17,2 — *M. G.* 407.
- $C_{17}H_{21}O_7N_5$  1) Benzoyltetra[Amidoacetyl]amidoessigsäure + *H\_2O*. Sm. 246—252° u. Zers. *Ag* (*J. pr.* [2] 70, 87, 95 *C.* 1904 [2] 1034, 1035).
- $C_{17}H_{22}ON_2$  \*1)  $\alpha$ -Oxydi[4-Dimethylamidophenylmethan] (*B.* 36, 4298 *C.* 1904 [1] 379).  
 9)  $\alpha\gamma$ -Di[4-Methylphenylamido]- $\beta$ -Oxypropan. Sm. 113,5° (*B.* 37, 3035 *C.* 1904 [2] 1213).
- $C_{17}H_{22}ON_4$  3) Äthoxyhydrat d. 3-Amido-7-Dimethylamido-2-Methyl-5,10-Naphtdiazin. Nitrat (*A.* 327, 124 *C.* 1903 [1] 1221).
- $C_{17}H_{22}O_2N_2$  \*1) Di[4-Dimethylamido-2-Oxyphenyl]methan (*B.* 37, 205 *Anm.* *C.* 1904 [1] 665).  
 \*2) Diäthyläther d. Di[4-Oxyphenylamido]methan. Sm. 89° (*B.* 36, 49 *C.* 1903 [1] 505).
- $C_{17}H_{22}O_2Cl_2$  1) l-Menthylester d. 2,3-Dichlorbenzol-1-Carbonsäure. *Sd.* 229°<sub>15</sub> (*Soc.* 83, 1214 *C.* 1903 [2] 1330).  
 2) l-Menthylester d. 2,4-Dichlorbenzol-1-Carbonsäure. *Sd.* 218—219°<sub>16</sub> (*Soc.* 83, 1214 *C.* 1903 [2] 1330).  
 3) l-Menthylester d. 2,5-Dichlorbenzol-1-Carbonsäure. Sm. 28—29°; *Sd.* 243—245°<sub>85</sub> (*Soc.* 83, 1214 *C.* 1903 [2] 1330).  
 4) l-Menthylester d. 2,6-Dichlorbenzol-1-Carbonsäure. Sm. 134—135° (*Soc.* 83, 1214 *C.* 1903 [2] 1330).  
 5) l-Menthylester d. 3,4-Dichlorbenzol-1-Carbonsäure. *Sd.* 244—245°<sub>85</sub> (*Soc.* 83, 1214 *C.* 1903 [2] 1330).  
 6) l-Menthylester d. 3,5-Dichlorbenzol-1-Carbonsäure. *Sd.* 223—225°<sub>20</sub> (*Soc.* 83, 1214 *C.* 1903 [2] 1330).
- $C_{17}H_{22}O_4N_6$  *C* 54,5 — *H* 5,9 — *O* 17,1 — *N* 22,5 — *M. G.* 374.  
 1) Azid d.  $\beta$ -[ $\beta$ -Benzoylamidoacetylamidobutyl]amidobuttersäure. Zers. bei 78° (*J. pr.* [2] 70, 222 *C.* 1904 [2] 1461).

- $C_{17}H_{22}O_6N_2$  C 58,3 — H 6,3 — O 27,4 — N 8,0 — M. G. 350.  
 1) Diäthylester d.  $\alpha$ -Benzoylamidoacetylamidoäthan- $\alpha\beta$ -Dicarbon-  
 säure. Sm. 92° (*J. pr.* [2] 70, 171 *C.* 1904 [2] 1396).
- $C_{17}H_{22}O_6N_4$  \*1) Äthylester d. Benzoyltri[Amidoacetyl]amidoessigsäure. Sm. 213°  
 (*B.* 37, 1284 *C.* 1904 [1] 1335; *B.* 37, 1299 *C.* 1904 [1] 1336; *J. pr.*  
 [2] 70, 85 *C.* 1904 [2] 1034).
- $C_{17}H_{22}O_8N_2$  2) Dicyanmalonacetbernsteinsäureesterlaktam. Sm. 116° (*A.* 332, 131  
*C.* 1904 [2] 190).
- $C_{17}H_{23}ON_3$  2) 3-Phenylsemicarbazon-4-Isopropyliden-1-Methylhexahydrobenzol  
 (Pulegonphenylcarbaminsäurehydrazon). Sm. 132—133° (*B.* 37, 3182  
*C.* 1904 [2] 991).
- 3) Phenylsemicarbazon d. d-Campher. Sm. 153—154° (*B.* 37, 3182  
*C.* 1904 [2] 991).
- $C_{17}H_{23}OCl$  \*1) 2-Chlor-3-Keto-1-Methyl-4-Isopropyl-2-Benzylhexahydrobenzol.  
 Sm. 140° (*C.* 1904 [2] 1043).
- $C_{17}H_{28}O_2N$  16) Benzylidentanacetonyhydroxylamin. Sm. 138—140° (*B.* 36, 4371  
*C.* 1904 [1] 456).
- 17) Benzoylderivat d.  $\beta$ -[2-Hydroxylamido-4-Methylhexahydrophenyl]-  
 propen. Sm. 63° (*B.* 36, 486 *C.* 1903 [1] 637).
- 18)  $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -[1-Piperidyl]- $\alpha$ -Phenylbutan. Sm. 93° (*Soc.* 85,  
 1176 *C.* 1904 [2] 1215).
- 19) Phenylamidoformiat d. isom. Terpeneol. Sm. 132° (*Soc.* 85, 1329  
*C.* 1904 [2] 1652).
- 20) Phenylamidoformiat d. l-Linalool. Sm. 65° (*J. pr.* [2] 67; 323  
*C.* 1903 [1] 1137).
- 21) Phenylamidoformiat d. Alkohol  $C_{10}H_{18}O$  (aus Camphenylon). Sm. 127,5  
 bis 128° (*B.* 37, 1037 *C.* 1904 [1] 1263).
- 22) Hydroxylaminderivat (aus Benzylidendihydrocarvon). Sm. 145—146°  
 (*A.* 305, 269). — \*III, 144.
- 23) Verbindung (aus Menthonamin). Sm. 145—146° (*C.* 1904 [1] 1517).
- 24) isom. Verbindung (aus Menthonamin). Sm. 85—86° (*C.* 1904 [1]  
 1517).
- $C_{17}H_{28}O_2Cl$  1) l-Menthylester d. 2-Chlorbenzol-1-Carbonsäure. Sd. 225°<sub>20</sub> (*Soc.* 83,  
 1214 *C.* 1903 [2] 1330).
- 2) l-Menthylester d. 3-Chlorbenzol-1-Carbonsäure. Sd. 218—219°<sub>14</sub>  
 (*Soc.* 83, 1214 *C.* 1903 [2] 1330).
- 3) l-Menthylester d. 4-Chlorbenzol-1-Carbonsäure. Sd. 231—232°<sub>20</sub>  
 (*Soc.* 83, 1214 *C.* 1903 [2] 1330).
- $C_{17}H_{28}O_2Br$  \*2) l-Menthylester d. 2-Brombenzol-1-Carbonsäure (*Soc.* 83, 1214  
*C.* 1903 [2] 1330).
- $C_{17}H_{28}O_2J$  1) l-Menthylester d. 2-Jodbenzol-1-Carbonsäure. Fl. (*Soc.* 85, 1272  
*C.* 1904 [2] 1303).
- 2) l-Menthylester d. 3-Jodbenzol-1-Carbonsäure. Fl. (*Soc.* 85, 1273  
*C.* 1904 [2] 1303).
- 3) l-Menthylester d. 4-Jodbenzol-1-Carbonsäure. Fl. (*Soc.* 85, 1274  
*C.* 1904 [2] 1303).
- $C_{17}H_{28}O_6N$  18) Benzoat d. Verbindung  $C_{10}H_{19}O_6N$ . Sm. 144°. HCl (*B.* 36, 768  
*C.* 1903 [1] 836).
- $C_{17}H_{28}O_6Br$  5) isom. 4-Bromphenyloxyhomocampholsäure. Sm. 120° (*C. r.* 136, 73  
*C.* 1903 [1] 459).
- $C_{17}H_{28}O_4N$  6) Anhydrocotarninmethylpropylketon. Sm. 86—92°. (2HCl, PtCl<sub>4</sub>)  
 (*B.* 37, 214 *C.* 1904 [1] 591).
- 7)  $\alpha$ -[3-Phenylamidoformoxyl-4-Methylhexahydrophenyl]propion-  
 säure. Sm. 227° (*B.* 36, 769 *C.* 1903 [1] 836).
- $C_{17}H_{28}O_4N_3$  C 61,3 — H 6,9 — O 19,2 — N 12,6 — M. G. 333.  
 1) Äthylester d. 2,5-Diketo-4,4-Dimethyl-1-Phenyltetrahydroimid-  
 azol-3- $\alpha$ -Amidoisobuttersäure. Sm. 98° (*C.* 1904 [2] 1029).
- $C_{17}H_{28}O_6N_3$  C 58,5 — H 6,6 — O 22,9 — N 12,0 — M. G. 349.  
 1)  $\beta$ -[ $\beta$ -Benzoylamidoacetylamidobutyryl]amidobuttersäure. Sm. 147°.  
 NH<sub>4</sub>, Ag (*J. pr.* [2] 70, 219 *C.* 1904 [2] 1461).
- 2) Äthylester d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amido-  
 propionsäure. Sm. 174—175° (*J. pr.* [2] 70, 123 *C.* 1904 [2] 1037).
- $C_{17}H_{28}O_6Cl$  1) Chlorhydrin d. Dehydrodioxyparasantonsäuredimethylester. Sm.  
 146° (*C.* 1903 [2] 1447).

- $C_{17}H_{28}O_6N$  C 60,5 — H 6,8 — O 28,5 — N 4,1 — M. G. 337.  
 1) Amid d. 3,4-Dioxy-1-[ $\alpha$ -Acetoxyl- $\gamma$ -Ketoisohexyl]benzol-3,4-Dimethyläther-2-Carbonsäure. Sm. 187° (*M.* 25, 1062 *C.* 1904 [2] 1644).  
 C 48,4 — H 5,5 — O 22,8 — N 23,3 — M. G. 421.
- $C_{17}H_{28}O_6N_7$  1) Hydrazid d. Benzoyltetra[Amidoacetyl]amidoessigsäure. Sm. 272 bis 274° (268—269°). HCl (*B.* 37, 1300 *C.* 1904 [1] 1337; *J. pr.* [2] 70, 97 *C.* 1904 [2] 1035).
- $C_{17}H_{24}O_4N_2$  3) Amylester d.  $\alpha$ -Benzoylamidoacetylamidopropionsäure. Sm. 96° (*J. pr.* [2] 70, 117 *C.* 1904 [2] 1036).
- $C_{17}H_{24}O_5N_4$  C 56,0 — H 6,6 — O 22,0 — N 15,4 — M. G. 364.  
 1)  $\alpha$ -Phenylamidoformylamidoisocapronylamidoacetylamidoessigsäure. Sm. 182—183° (*B.* 36, 2991 *C.* 1903 [2] 1112).  
 2) Aethylester d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amidoäthylamidoameisensäure. Sm. 203° (*J. pr.* [2] 70, 126 *C.* 1904 [2] 1037).  
 C 53,7 — H 6,3 — O 25,2 — N 14,7 — M. G. 380.
- $C_{17}H_{24}O_6N_4$  1) Diäthylester d.  $\alpha$ -Benzoylamidoacetylamidoäthan- $\alpha\beta$ -Di[Amidoameisensäure]. Sm. 214° (*J. pr.* [2] 70, 178 *C.* 1904 [2] 1396).
- $C_{17}H_{24}O_7S$  1) Cuminyldenmalonäthylesterhydrosulfonsäure.  $K + \frac{1}{2}H_2O$  (*B.* 37, 4059 *C.* 1904 [2] 1649).
- $C_{17}H_{24}O_{11}N_2$  C 47,2 — H 5,6 — O 40,7 — N 6,5 — M. G. 432.  
 1) Pentaacetat d. Glykoseureid. Sm. 200° (*R.* 22, 59 *C.* 1903 [1] 1080).
- $C_{17}H_{24}NCl$  2) Chlormethylat d. 4-Methyl-7-Isopropylcarbazolenin.  $2 + PtCl_4 + AuCl_3$  (*C.* 1904 [2] 343).
- $C_{17}H_{24}NJ$  2) Jodmethylat d. 4-Methyl-7-Isopropylcarbazolenin. Sm. 209—210° u. Zers. (*C.* 1904 [2] 342).
- $C_{17}H_{24}N_2S$  12) isom. s-Phenylcamphylthioharnstoff? Sm. 150—152° (*B.* 37, 160 *C.* 1904 [1] 582).
- $C_{17}H_{25}ON$  7) Benzoyl-l-Menthylamin. Sm. 156° (*Soc.* 85, 70 *C.* 1904 [1] 375, 808).  
 8) Benzoyl-iso-l-Menthylamin. Sm. 121° (*Soc.* 85, 121 *C.* 1904 [1] 808).  
 9) Benzoyl-neo-l-Menthylamin. Sm. 128° (*Soc.* 85, 77 *C.* 1904 [1] 375, 808).  
 10) Benzoyl-iso-neo-l-Menthylamin. Sm. 104° (*Soc.* 85, 77 *C.* 1904 [1] 375, 808).
- $C_{17}H_{25}ON_3$  2)  $\alpha$ -Phenylamido- $\beta$ -Bornylharnstoff. Sm. 140° u. Zers. (*Soc.* 85, 1191 *C.* 1904 [2] 1125).  
 3) 1-3-Phenylsemicarbazol-4-Isopropyl-1-Methylhexahydrobenzol. Sm. 180—181° (*B.* 37, 3182 *C.* 1904 [2] 991).
- $C_{17}H_{25}O_2N$  5) 3-Keto-2-[ $\alpha$ -Hydroxylamidobenzyl]-4-Isopropyl-1-Methylhexahydrobenzol. Sm. 162° (*B.* 37, 234 *C.* 1904 [1] 725).  
 6) Hydroxylaminderivat d. isom. Benzylidenmenthon vom Sm. 47°. Sm. 155° (*C. r.* 134, 1438 *C.* 1902 [2] 280; *C.* 1904 [2] 1044).  
 7) Hydroxylaminderivat d. isom. Benzylidenmenthon vom Sm. 51°. Sm. 172° (*C. r.* 134, 1437 *C.* 1902 [2] 280; *C.* 1904 [2] 1044).  
 8) Phenylamidoformiat d. 2-Oxymethyl-1,1,2,5-Tetramethyl-R-Pentamethylen. Sm. 45° (*Bl.* [3] 31, 750 *C.* 1904 [2] 303).
- $C_{17}H_{25}O_3N$  8) Phenylmonamid d. cis- $\beta\zeta$ -Dimethylheptan- $\gamma\delta$ -Dicarbonsäure. Sm. 149—150° (*Am.* 30, 238 *C.* 1903 [2] 934).
- $C_{17}H_{25}O_4N_3$  C 60,9 — H 7,5 — O 19,1 — N 12,5 — M. G. 335.  
 1)  $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amidoacetylamido- $\beta$ -Phenylpropionsäure. Sm. 225—228° (*B.* 37, 3314 *C.* 1904 [2] 1307).
- $C_{17}H_{25}O_4N_5$  C 56,1 — H 6,9 — O 17,6 — N 19,3 — M. G. 363.  
 1) Hydrazid d.  $\beta$ -[ $\beta$ -Benzoylamidoacetylamidobutryl]amidobuttersäure. Sm. 194°. HCl (*J. pr.* [2] 70, 221 *C.* 1904 [2] 1461).
- $C_{17}H_{25}O_4Br$  1) Monoäthylester d. Säure  $C_{15}H_{21}O_4Br$  (aus Dibromparasantonsäure). Sm. 93—95° (*C.* 1903 [2] 1447).
- $C_{17}H_{26}O_3N_2$  C 66,7 — H 8,5 — O 15,7 — N 9,1 — M. G. 306.  
 1) Acetat d. Oxylupanin. (HCl,  $AuCl_3$ ) (*Ar.* 242, 428 *C.* 1904 [2] 782).  
 2) Aethylester d.  $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido- $\beta$ -Phenylpropionsäure. HCl (*B.* 37, 3310 *C.* 1904 [2] 1306).
- $C_{17}H_{27}ON$  \*3) 3-Oxy-2-Phenylamidomethyl-4-Isopropyl-1-Methylhexahydrobenzol (*C.* 1904 [2] 1044).  
 4) 3-Oxy-2-[ $\alpha$ -Amidobenzyl]-4-Isopropyl-1-Methylhexahydrobenzol. Sd. 202—206°<sub>15</sub> (*B.* 37, 235 *C.* 1904 [1] 725).

- $C_{17}H_{27}O_2N$  4) Benzoat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ s-Dimethylhexan. HCl (*C.r.* 138, 767 *C.* 1904 [1] 1196).  
 $C_{17}H_{27}O_2N_3$  C 66,9 — H 8,8 — O 10,5 — N 13,8 — M. G. 305.  
 1) Semicarbazone d. Methylpseudojononhydrat (D.R.P. 150771 *C.* 1904 [1] 1307).  
 2) Semicarbazone d. isom. Methylpseudojononhydrat. Sm. 193° (D.R.P. 150771 *C.* 1904 [1] 1307).  
 $C_{17}H_{27}O_3N$  \*2) 2-Methoxyphenylester d. Diisobutylamidoessigsäure. Fl. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HJ (*Ar.* 240, 638 *C.* 1903 [1] 24).  
 $C_{17}H_{28}O_4S_2$  1)  $\alpha$ -Di[Isoamylsulfon]- $\alpha$ -Phenylmethan. Sm. 99—100° (*B.* 36, 298 *C.* 1903 [1] 499).  
 $C_{17}H_{28}O_5S_3$  1)  $\alpha$ - $\delta$ -Triäthylsulfon- $\alpha$ -Phenylpentan. Sm. 163° (*B.* 37, 508 *C.* 1904 [1] 883).  
 $C_{17}H_{28}NJ$  1) Jodäthylat d. d-2-Propyl-1-Benzylhexahydropyridin (J. d. N-Benzylconiin). Sm. 179° (*B.* 37, 3631 *C.* 1904 [2] 1510).  
 2) isom. Jodäthylat d. d-2-Propyl-1-Benzylhexahydropyridin. Sm. 208° (*B.* 37, 3632 *C.* 1904 [2] 1510).  
 $C_{17}H_{33}O_2Br$  2)  $\alpha$ -Bromhexadekan- $\alpha$ -Carbonsäure. Sm. 52,5° (*Soc.* 85, 838 *C.* 1904 [2] 509).  
 $C_{17}H_{35}ON$  2)  $\alpha$ -Oximidoheptadekan. Sm. 89,5° (*Soc.* 85, 834 *C.* 1904 [2] 509).  
 3) Amid d. Margarinsäure. Sm. 106° (*Soc.* 85, 837 *C.* 1904 [2] 509).  
 $C_{17}H_{35}O_2N$  \*1) Sphingosin. H<sub>2</sub>SO<sub>4</sub> (*H.* 43, 29 *C.* 1904 [2] 1550).  
 $C_{17}H_{40}O_{18}N_4$  C 40,2 — H 7,9 — O 40,9 — N 11,0 — M. G. 508.  
 1) Verbindung (aus d. Nitril d. Methylenamidoessigsäure). 4HCl (*B.* 36, 1509 *C.* 1903 [1] 1302).

## — 17 IV —

- $C_{17}H_{10}O_2N_2Br_2$  1) Dibrommethylindigo (D.R.P. 149940 *C.* 1904 [1] 1046).  
 $C_{17}H_{10}O_5N_2S$  1) Methylenindigosulfonsäure (*C.* 1903 [2] 835).  
 $C_{17}H_{10}O_8N_2Br_4$  1) Diacetat d. 2,5,2',5' [oder 5,6,5',6']-Tetrabrom-3,3'-Dinitro-4,4'-Dioxydiphenylmethan. Sm. 167° (*A.* 333, 367 *C.* 1904 [2] 1117).  
 $C_{17}H_{11}OClS$  1) Benzoat d. 4-Chlor-1-Merkaptonaphtalin. Sm. 111—112° (*C.r.* 138, 983 *C.* 1904 [1] 1413).  
 $C_{17}H_{11}OBrS$  1) Benzoat d. 4-Brom-1-Merkaptonaphtalin. Sm. 120—121° (*C.r.* 138, 983 *C.* 1904 [1] 1413).  
 $C_{17}H_{11}O_2N_2Cl$  3) 1-[6-Chlor-3-Nitrophenyl]amidonaphtalin. Sm. 176° (*M.* 25, 371 *C.* 1904 [2] 322).  
 $C_{17}H_{11}O_2N_2Br$  3)  $\beta$ -Brom- $\alpha$ -[2-Nitrophenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 274° (*B.* 36, 1667 *C.* 1903 [2] 49).  
 4) Brommethylindigo (D.R.P. 149940 *C.* 1904 [1] 1046).  
 $C_{17}H_{11}O_2N_3Br_2$  1) Phenylamid d. 3,3'-Dibrom-4-Oxy-1-Naphtylazoameisensäure. Sm. 250° u. Zers. (*A.* 334, 200 *C.* 1904 [2] 835).  
 $C_{17}H_{11}O_3NS_2$  1) 3,4-Methylenäther d. 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 193° (*M.* 24, 511 *C.* 1903 [2] 836).  
 $C_{17}H_{12}ON_2Br_2$  4) 2-Oxy-1-[2,6-Dibrom-4-Methylphenylazo]naphtalin. Sm. 141° (*Soc.* 83, 812 *C.* 1903 [2] 426).  
 $C_{17}H_{12}O_2N_2Br_2$  2) Nitril d.  $\gamma$ - $\delta$ -Dibrom- $\alpha$ -[4-Nitrophenyl]- $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 173—180° (*A.* 336, 220 *C.* 1904 [2] 1733).  
 $C_{17}H_{12}O_2N_3Br$  1) Phenylamid d. 3-Brom-4-Oxy-1-Naphtylazoameisensäure. Sm. 250° u. Zers. (*A.* 334, 199 *C.* 1904 [2] 835).  
 $C_{17}H_{12}O_3N_2S$  1) 3,4-Methylenäther d. 2-Phenylimido-4-Keto-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 259—261° (*C.* 1903 [1] 1258).  
 $C_{17}H_{12}O_3N_3Cl$  1) 5-Keto-3-Methyl-4-[4-Chlor-2-Nitrobenzyliden]-1-Phenyl-4,5-Dihydropyrazol. Sm. 180° (*B.* 37, 1865 *C.* 1904 [1] 1600).  
 $C_{17}H_{12}O_4NBr$  1) Laktone d.  $\gamma$ -Brom- $\delta$ -Oxy- $\delta$ -Phenyl- $\alpha$ -[4-Nitrophenyl]- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 169—171° (*B.* 37, 1123 *C.* 1904 [1] 1210; *A.* 336, 219 *C.* 1904 [2] 1733).  
 $C_{17}H_{12}O_4N_3Br$  1) Äthylester d. 4-Brom-2-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amido-benzol-1-Carbonsäure. Sm. 144° (*B.* 37, 1872 *C.* 1904 [1] 1601).  
 $C_{17}H_{12}O_5N_2Br_2$  1) Diacetat d. 5,5'-Dibrom-3,3'-Dinitro-4,4'-Dioxydiphenylmethan. Sm. 185° (*A.* 333, 366 *C.* 1904 [2] 1117).

- $C_{17}H_{18}ON_2Cl$  2) 5-Chlor-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 88°; Sd. 245° (B. 36, 524 C. 1903 [1] 641).
- $C_{17}H_{18}O_2NS_2$  1) Methyläther d. 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[4-Oxybenzyliden]tetrahydrothiazol. Sm. 221° (M. 24, 509 C. 1904 [2] 836).
- $C_{17}H_{18}O_3NBr_4$  1) Acetat d. N-Acetylphenyl-3,4,5,6-Tetrabrom-2-Oxybenzylamin Sm. 161—162° (A. 332, 180 C. 1904 [2] 209).
- $C_{17}H_{18}O_3NS_2$  1) 5<sup>3</sup>-Methyläther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Phenyltetrahydrothiazol. Sm. 193° (M. 25, 16 C. 1904 [1] 894).
- $C_{17}H_{18}O_4NBr_2$  1)  $\gamma\delta$ -Dibrom- $\delta$ -Phenyl- $\alpha$ -[4-Nitrophenyl]- $\alpha$ -Buten- $\alpha$ -Carbonsäure Sm. 207—209° (B. 37, 1124 C. 1904 [1] 1210; A. 336, 218 C. 1904 [2] 1732).
- $C_{17}H_{18}O_5NS$  2) 1-Phenylamidonaphtalin-1<sup>2</sup>-Carbonsäure-4-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).  
3) 1-Phenylamidonaphtalin-1<sup>2</sup>-Carbonsäure-5-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).  
4) 1-Phenylamidonaphtalin-1<sup>2</sup>-Carbonsäure-7-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).  
5) 2-Phenylamidonaphtalin-2<sup>2</sup>-Carbonsäure-5-Sulfonsäure (D. R. P. 146102 C. 1903 [2] 1152).  
6) 2-Phenylamidonaphtalin-2<sup>2</sup>-Carbonsäure-6-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
- $C_{17}H_{18}ONCl$  2) Äthyläther d. 1-Chlor-4-Oxy-3-Phenylisochinolin. Sm. 82—83° (B. 37, 1691 C. 1904 [1] 1524).  
3) Phenacylchlorid d. Chinolin +  $H_2O$ . Sm. 193—197° (wasserfrei). 2 +  $PtCl_4$ , +  $AuCl_3$  (Ar. 240, 692 Anm. C. 1903 [1] 402).  
4) Phenacylchlorid d. Isochinolin +  $2H_2O$ . +  $HgCl_2$ , 2 +  $PtCl_4$ , +  $AuCl_3$  (Ar. 240, 701 Anm. C. 1903 [1] 403).
- $C_{17}H_{18}ONBr$  \*2) Phenacylbromid d. Chinolin +  $H_2O$ . Sm. 117—118° (169° wasserfrei) (Ar. 240, 692 C. 1903 [1] 402).  
\*3) Phenacylbromid d. Isochinolin +  $\frac{1}{2}H_2O$ . Sm. 206° wasserfrei (Ar. 240, 701 C. 1903 [1] 403).
- $C_{17}H_{18}ON_2S$  1) Benzozat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sm. 93° (B. 37, 2774 C. 1904 [2] 711).
- $C_{17}H_{18}ON_2Cl$  3) 5-Keto-3-Methyl-4-[4-Chlor-2-Amidobenzyliden]-1-Phenyl-4,5-Dihydropyrazol. Sm. 265° (B. 37, 1873 C. 1904 [1] 1602).
- $C_{17}H_{18}O_5N_2S$  1) 6-[3-Amidobenzoyl]amido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 151017 C. 1904 [1] 1381).
- $C_{17}H_{18}O_5N_3Br$  1) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Brom-3-Nitro-2-Oxybenzyliden]hydrazin. Sm. 203—204° (B. 37, 3936 C. 1904 [2] 1596).
- $C_{17}H_{18}ON_2Cl$  1) Oxim d. Chinolinphenacylchlorid.  $HCl$  +  $1\frac{1}{2}H_2O$  (Ar. 240, 697 C. 1903 [1] 402).  
2) Oxim d. Isochinolinphenacylchlorid +  $1\frac{1}{2}H_2O$ . Sm. 147° (Ar. 240, 704 C. 1903 [1] 403).  
3) Phenylamid d. Chlorchinoliniumessigsäure +  $H_2O$ . 2 +  $PtCl_4$ , +  $AuCl_3$  (Ar. 241, 126 C. 1903 [1] 1024).  
4) Phenylamid d. Chlorisochinoliniumessigsäure. Sm. 202—206°. +  $HgCl_2$ , 2 +  $PtCl_4$ , +  $AuCl_3$  (Ar. 240, 706 C. 1903 [1] 403; Ar. 241, 127 C. 1903 [1] 1024).
- $C_{17}H_{18}ON_2Br$  1) Oxim d. Chinolinphenacylbromid. Sm. 207° (Ar. 240, 693 C. 1903 [1] 402).  
2) Oxim d. Isochinolinphenacylbromid. Sm. 195—205° (Ar. 240, 701 C. 1903 [1] 403).  
3) Phenylamid d. Bromchinoliniumessigsäure. Sm. 225—227° (Ar. 241, 126 C. 1903 [1] 1023).  
4) Phenylamid d. Bromisochinoliniumessigsäure. Sm. 216—218° (Ar. 241, 127 C. 1903 [1] 1024).
- $C_{17}H_{18}OClBr_2$  1)  $\epsilon$ -Chlor- $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\alpha\epsilon$ -Diphenylbutan. Sm. 128° (B. 36, 2376 C. 1903 [2] 495).
- $C_{17}H_{18}O_2NBr_2$  1) Acetat d. N-Acetylphenyl-3,5-Dibrom-2-Oxybenzylamin (A. 332, 178 C. 1904 [2] 261).

- $C_{17}H_{15}O_2N_2Cl$  1)  $\alpha$ -Acetylimido- $\alpha$ -[Acetyl-4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 170° (*J. pr.* [2] 67, 456 *C.* 1903 [1] 1421).
- $C_{17}H_{15}O_3NS$  9) 2-[2-Methylphenyl]amidonaphtalin-6-Sulfonsäure. Na, Ca, Ba (*C.* 1904 [1] 1013).
- 10) 2-[4-Methylphenyl]amidonaphtalin-6-Sulfonsäure (*C.* 1904 [1] 1013).
- 11) 2-[4-Methylphenyl]amidonaphtalin-8-Sulfonsäure. Na (*C.* 1904 [1] 1013).
- $C_{17}H_{15}O_3N_2Br$  1) Benzyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 120° (*J. pr.* [2] 45, 189). — IV, 266.
- 2) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Brom-2-Oxybenzyliden]-hydrazin. Sm. 136—137° (*B.* 37, 3934 *C.* 1904 [2] 1596).
- $C_{17}H_{15}O_4NBr_2$  1) Methylester d. N-Acetyl-3-[3,5-Dibrom-2-Oxybenzyl]amido-benzol-1-Carbonsäure. Sm. 117—119° (*A.* 332, 196 *C.* 1904 [2] 210).
- $C_{17}H_{15}O_4NS$  4) 6-Aethylphenylsulfonamido-1,2-Benzpyron. Sm. 124° (*Soc.* 85, 1238 *C.* 1904 [2] 1124).
- $C_{17}H_{15}O_5N_3S$  1) 6-[4-Amidophenyl]ureido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 151017 *C.* 1904 [1] 1382).
- $C_{17}H_{15}O_6NS_2$  1) 2-[4-Methylphenyl]amidonaphtalin-6,8-Disulfonsäure (*C.* 1904 [1] 1013).
- $C_{17}H_{15}N_2Cl_2Br$  1) Isochinolin +  $\beta\beta$ -Dichlor- $\gamma$ -Brom- $\alpha$ -Phenylamidopropan. 2 +  $PtCl_4$ , +  $AuCl_3$  (*Ar.* 241, 121 *C.* 1903 [1] 1023).
- $C_{17}H_{16}ONBr$  2) 8-Brom-5-Benzoylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 202 bis 203° (*Soc.* 85, 746 *C.* 1904 [2] 447).
- $C_{17}H_{16}ON_2S$  3) 2-[2-Methylphenyl]imido-4-Keto-3-[2-Methylphenyl]tetrahydrothiazol. Sm. 151—152° (*C.* 1903 [1] 1258).
- 4) 1-[Acetyl-2-Methylphenyl]amido-4-Methylbenzthiazol. Sm. 77° (*B.* 36, 3130 *C.* 1903 [2] 1070).
- 5) 1-[Acetyl-4-Methylphenyl]amido-5-Methylbenzthiazol. Sm. 158° (*B.* 36, 3131 *C.* 1903 [2] 1070).
- $C_{17}H_{16}ON_4S$  1) 1-Phenylthioureido-2-Thiocarbonyl-4-Keto-5-Methyl-3-Phenyltetrahydroimidazol. Sm. 223° u. Zers. (*C.* 1904 [2] 1027).
- $C_{17}H_{16}O_2N_2S$  5) 5-Benzylsulfon-3-Methyl-1-Phenylpyrazol. Sm. 92° (*A.* 331, 238 *C.* 1904 [1] 1221).
- 6) 2-Acetat d. 2-Merkapto-6-Oxy-1-Phenylbenzimidazol-6-Aethyläther. Sm. 163—164° (*B.* 36, 3849 *C.* 1904 [1] 89).
- $C_{17}H_{16}O_3NCl$  3) Acetat d. 4-Chlor-1-[Acetyl-2-Oxybenzyl]amidobenzol (*Ar.* 240, 685 *C.* 1903 [1] 395).
- $C_{17}H_{16}O_3NBr$  4) Acetat d. 4-Brom-1-[Acetyl-2-Oxybenzyl]amidobenzol (*Ar.* 240, 686 *C.* 1903 [1] 395).
- $C_{17}H_{16}O_3ClJ$  1) 4-Benzoat d. 3,4-Dioxy-1-[ $\alpha$ -Chlor- $\beta$ -Jodpropyl]benzol-3-Methyläther (*C.* 1904 [2] 506).
- 2) 4-Benzoat d. 3,4-Dioxy-1-[ $\beta$ -Chlor- $\gamma$ -Jodpropyl]benzol-3-Methyläther. Sm. 91° (*C.* 1904 [2] 506).
- $C_{17}H_{16}O_6N_2S_2$  1) Verbindung (aus Pyridin u. Sulfanilsäure). Na (*J. pr.* [2] 69, 131 *C.* 1904 [1] 816).
- $C_{17}H_{16}N_8ClS$  1)  $\alpha$ -Allylamidothioformylimido- $\alpha$ -[4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 169—171° (*J. pr.* [2] 61, 1903 [1] 1422).
- $C_{17}H_{17}ON_3S$  1)  $\beta$ -Benzoylamido- $\alpha$ -Isopropylidenamido- $\alpha$ -Phenylthioharnstoff. Sm. 136° (*Am.* 32, 369 *C.* 1904 [2] 1507).
- 2) 1-Phenylamido-2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Phenyltetrahydroimidazol. Sm. 206° (*C.* 1904 [2] 1028).
- $C_{17}H_{17}O_2NBr_2$  \*1) 3,6-Dibrom-5-Oxy-2-Acetylphenylamido-1,4-Dimethylbenzol. Sm. 223—225° (*A.* 332, 184 *C.* 1904 [2] 209).
- \*2) Acetat d. 3,6-Dibrom-5-Oxy-2-Phenylamidomethyl-1,4-Dimethylbenzol. Sm. 120° (*A.* 332, 183 *C.* 1904 [2] 209).
- $C_{17}H_{17}O_2N_2Br$  1) 4-Oxybromphenylat d. 2-[4-Oxyphenyl]amido-1,2-Dihydropyridin. Sm. 181° (*J. pr.* [2] 69, 130 *C.* 1904 [1] 815).
- $C_{17}H_{17}O_2N_3Br_2$  1) Phenylamid d. 3,6-Dibrom-4-Oxy-5-Isopropyl-2-Methylphenylazoameisensäure. Sm. 199—200° (*A.* 334, 197 *C.* 1904 [2] 835).
- $C_{17}H_{17}O_2N_3S$  2) 3-Phenylsulfonimido-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 211° (*B.* 36, 3286 *C.* 1903 [2] 1190).

- $C_{17}H_{17}O_8NS$  2) 4-[4-Methylphenyl]merkaptophenylamid d. Oxalsäuremono-äthylester (p-Thiotolylphenyloxamäthan). Sm. 121° (*J. pr.* [2] 68, 268 *C.* 1903 [2] 993).
- $C_{17}H_{18}ONBr_3$  1) 3,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 99—100°. HBr (*A.* 334, 297 *C.* 1904 [2] 985).  
2) 2,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 135°. HBr (*A.* 334, 323 *C.* 1904 [2] 987).
- $C_{17}H_{18}ON_2S$  \*4) 6-Aethyläther d. 2-Merkapto-6-Oxy-5-Methyl-1-[4-Methylphenyl]benzimidazol. Sm. 205—206° (*B.* 36, 3855 *C.* 1904 [1] 90).  
11) 6-Aethyläther d. 2-Merkapto-6-Oxy-4-Methyl-1-[2-Methylphenyl]benzimidazol. Sm. 240° (*B.* 36, 3854 *C.* 1904 [1] 90).
- $C_{17}H_{18}ON_2S_2$  2) Dimethyläther d. 5-Merkapto-2-Oxy-2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 95° (*J. pr.* [2] 67, 260 *C.* 1903 [1] 1266).  
3) 5-Methyläther-2-Aethyläther d. 5-Merkapto-2-Oxy-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 106° (*J. pr.* [2] 67, 224 *C.* 1903 [1] 1261).
- $C_{17}H_{18}ON_4S_2$  1) s-Di[4-Methylphenylamidothioformyl]harnstoff. Sm. 172° (*Soc.* 83, 94 *C.* 1903 [1] 230, 447).
- $C_{17}H_{18}O_2N_3Br$  1) Phenylamid d. 3-Brom-4-Oxy-5-Isopropyl-2-Methylphenylazoameisensäure. Sm. 203° (*A.* 334, 196 *C.* 1904 [2] 835).
- $C_{17}H_{18}O_2N_5Br$  1)  $\beta$ -Methyl- $\alpha$ -Phenylhydrazid d.  $\alpha$ -Oximido- $\beta$ -[4-Bromphenyl]hydrazonbuttersäure. Sm. 205° u. Zers. +  $\beta$ -Methyläther (*A.* 328, 74 *C.* 1903 [2] 249).
- $C_{17}H_{18}O_3N_3S$  2) Inn. Anhydrid d.  $\alpha$ -[ $\alpha\beta$ -Di(4-Methylphenyl)ureido]äthan- $\beta$ -Sulfonsäure. Sm. 204° (*M.* 25, 683 *C.* 1904 [2] 1122).
- $C_{17}H_{18}O_3N_4Br_2$  \*1) Di[4-Bromphenylhydrazon] d. l-Arabinose. Sm. 171° u. Zers. (*Soc.* 83, 1285 *C.* 1904 [1] 86).
- $C_{17}H_{18}O_4NBr$  3) Benzoat d.  $\beta$ -Bromcamphoryloxim. Sm. 134° (*Soc.* 83, 966 *C.* 1903 [1] 1411 *C.* 1903 [2] 666).  
4) Benzoat d.  $\pi$ -Brom- $\alpha$ -Isonitrosocampher. Sm. 185° (*Soc.* 83, 967 *C.* 1903 [1] 1611 *C.* 1903 [2] 666).
- $C_{17}H_{18}O_6N_3Br$  1) Dimethylamidobenzol + 4-Brom-3,5-Dinitrobenzol-1-Carbonsäure. Sm. 56° (*B.* 37, 179 *C.* 1904 [1] 653).
- $C_{17}H_{18}O_{12}N_5Cl$  1) Triäthylester d. 5-Chlor-2,4,6-Trinitrobenzol-1-Methylcarbonsäure-3-Methyldicarbonsäure. Sm. 147—148° (*Am.* 32, 179 *C.* 1904 [2] 951).
- $C_{17}H_{19}ONBr_2$  \*1) 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 124°. HBr, HJ (*A.* 334, 287, 307 *C.* 1904 [2] 984, 986).  
2) 2,6-Dibrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 128°. HBr (*A.* 334, 319 *C.* 1904 [2] 987).  
3) Methyläther d. Methylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 90—91° (*A.* 334, 304 *C.* 1904 [2] 985).
- $C_{17}H_{19}ON_2S_2$  1) Dimethyläther d.  $\alpha$ -Dimerkaptomethylenamido- $\alpha$ -[2-Methylphenyl]- $\beta$ -Phenylharnstoff. Sm. 98° (*B.* 36, 1370 *C.* 1903 [1] 1342).  
2) Dimethyläther d.  $\alpha$ -Dimerkaptomethylenamido- $\alpha$ -[3-Methylphenyl]- $\beta$ -Phenylharnstoff. Sm. 127° (*B.* 36, 1373 *C.* 1903 [1] 1343).
- $C_{17}H_{19}O_2NS$  3) Äthylester d. 4-Merkapto-2-Methylphenylamidoameisen-4-Methylphenyläthersäure. Sm. 81° (*J. pr.* [2] 68, 285 *C.* 1903 [2] 995).
- $C_{17}H_{19}O_6N_2P$  1) Trimethylester d. Phosphorsäuredi[Phenylamid]-2,2'-Dicarbonsäure. Sm. 174° (*B.* 36, 1828 *C.* 1903 [2] 201).
- $C_{17}H_{20}ONBr$  1) 6-Brom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 155—157° (*A.* 334, 335 *C.* 1904 [2] 989).
- $C_{17}H_{20}ONBr_5$  1) Bromderivat d. Base  $C_{17}H_{21}ON$  (aus  $\alpha$ -Oxybenzylidencampher). Sm. 173° (*Soc.* 83, 108 *C.* 1903 [1] 233, 458).
- $C_{17}H_{20}ON_2Br_2$  1) 3,6-Dibrom-6'-Dimethylamido-3'-Amido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 141—142°. HBr (*A.* 334, 313 *C.* 1904 [2] 986).
- $C_{17}H_{20}ON_2S$  2) Äthyläther d. 6-Oxy-3,4'-Dimethyl-s-Diphenylthioharnstoff. Sm. 158° (*B.* 36, 3856 *C.* 1904 [1] 90).
- $C_{17}H_{20}O_2NCl$  3) Benzoat d. act. Hydrochlorcarvoxim. Sm. 114—115° (*B.* 18, 2222; *A.* 270, 179). — \*III, 394.

- $C_{17}H_{20}O_9NP$  1) Diphenylester d. 1-Piperidylphosphinsäure. Sm. 70° (A. 326, 187 C. 1903 [1] 820). — \*IV, 9.
- $C_{17}H_{20}O_6N_2S$  1) Aethylester d.  $\alpha$ -d-[2-Naphtylsulfonamidopropionyl]amidoessigsäure. Sm. 104° (B. 36, 2596 C. 1903 [2] 618).
- $C_{17}H_{20}O_6N_4Br_2$  1) 4-Bromphenylhydrazid einer Arabinose-p-Bromphenylhydrazonsäure. Sm. 112° u. Zers. (Soc. 83, 1287 C. 1904 [1] 86).
- $C_{17}H_{21}O_2NS$  7) Phenylamid d.  $\beta$ -Phenylpentan- $\beta$ -Sulfonsäure. Sm. 60–61° (B. 36, 3690 C. 1903 [2] 1426).
- 8) Phenylamid d. 1-Aethyl-4-Isopropylbenzol-P-Sulfonsäure. Sm. 110° (92–93°) (B. 36, 1641 C. 1903 [2] 27).
- 9) Phenylamid d. 1,3,5-Trimethyl-2-Aethylbenzol-4-Sulfonsäure. Sm. 123–124° (B. 36, 1644 C. 1903 [2] 27).
- $C_{17}H_{22}ON_2S$  1) Phenylthioharnstoff d.  $\alpha$ -Anhydropulegonhydroxylamin. Sm. 134° (B. 37, 957 C. 1904 [1] 1087).
- $C_{17}H_{22}O_2ClBr$  1) 1-Menthylester d. 2-Chlor-3-Brombenzol-1-Carbonsäure. Sm. 31 bis 32°; Sd. 237–239°<sub>22</sub> (Soc. 85, 1264 C. 1904 [2] 1302).
- 2) 1-Menthylester d. 2-Chlor-4-Brombenzol-1-Carbonsäure. Sd. 224 bis 226° (Soc. 85, 1264 C. 1904 [2] 1302).
- 3) 1-Menthylester d. 2-Chlor-5-Brombenzol-1-Carbonsäure. Sm. 34 bis 35°; Sd. 224° (Soc. 85, 1264 C. 1904 [2] 1302).
- 4) 1-Menthylester d. 2-Chlor-6-Brombenzol-1-Carbonsäure. Sm. 144 bis 145° (Soc. 85, 1264 C. 1904 [2] 1302).
- 5) 1-Menthylester d. 3-Chlor-2-Brombenzol-1-Carbonsäure. Sd. 227 bis 229° (Soc. 85, 1264 C. 1904 [2] 1302).
- 6) 1-Menthylester d. 3-Chlor-4-Brombenzol-1-Carbonsäure. Sm. 46 bis 47°; Sd. 225–227° (Soc. 85, 1264 C. 1904 [2] 1302).
- 7) 1-Menthylester d. 3-Chlor-5-Brombenzol-1-Carbonsäure. Sd. 226 bis 228° (Soc. 85, 1264 C. 1904 [2] 1302).
- 8) 1-Menthylester d. 3-Chlor-6-Brombenzol-1-Carbonsäure. Sm. 36,5 bis 37,5° (Soc. 85, 1264 C. 1904 [2] 1302).
- 9) 1-Menthylester d. 4-Chlor-2-Brombenzol-1-Carbonsäure. Sd. 221 bis 223° (Soc. 85, 1264 C. 1904 [2] 1302).
- 10) 1-Menthylester d. 4-Chlor-3-Brombenzol-1-Carbonsäure. Sm. 35 bis 36°; Sd. 223–225° (Soc. 85, 1264 C. 1904 [2] 1302).
- $C_{17}H_{22}O_4N_2S_2$  4)  $\alpha$ -s-Di[Phenylsulfonamido]pentan. Sm. 119° (B. 37, 3588 C. 1904 [2] 1407).
- $C_{17}H_{22}N_3SP$  1) Di[Phenylamid] d. 1-Piperidylphosphinsäure. Sm. 199° (A. 326, 215 C. 1903 [1] 822). — \*IV, 9.
- $C_{17}H_{23}O_5NBr$  1) Brommethylester d. Homöotropin. Sm. 180–181° (D.R.P. 145996 C. 1903 [2] 1226).
- $C_{17}H_{23}O_5N_5S$  1) Aethylester d. 2-Thiocarbonyl-4-Keto-5-Dimethyl-3-Phenyltetrahydroimidazol-1- $\alpha$ -Amidoisobuttersäure. Sm. 84° (C. 1904 [2] 1028).
- $C_{17}H_{23}O_4N_2Br$  1)  $\alpha$ -[ $\alpha$ -Bromisocapronyl]amidoacetyl-amido- $\beta$ -Phenylpropionsäure. Sm. 163–164° (B. 37, 3314 C. 1904 [2] 1307).
- $C_{17}H_{24}ON_3P$  1) Amylamid-Di[Phenylamid] d. Phosphorsäure. Sm. 117° (A. 326, 174 C. 1903 [1] 819).
- $C_{17}H_{24}O_5N_2Cl_3$  1) Verbindung (aus Butylchloral u. 4-Dimethylamido-3-Keto-1,3-Dimethyl-2-Phenyl-2,3-Dihydropyrazol). Sm. 8° (D.R.P. 150799 C. 1904 [1] 1379).
- $C_{17}H_{24}O_4NCl$  1) Chlormethylester d. Anhydromethyleotarninaceton. 2 + PtCl<sub>4</sub> (B. 37, 213 C. 1904 [1] 590).
- $C_{17}H_{24}O_4NJ$  1) Jodmethylester d. Anhydromethyleotarninaceton. Sm. 144° (B. 37, 213 C. 1904 [1] 590).
- $C_{17}H_{24}N_5SP$  1) Di[Phenylhydrazid] d. 1-Piperidylthiophosphinsäure. Sm. 158° (A. 326, 215 C. 1903 [1] 822).
- $C_{17}H_{26}ON_2S$  1) 3-Oxy-4-[ $\alpha$ -Phenylthioureidoisopropyl]-1-Methylhexahydrobenzol. Sm. 132° (B. 37, 2286 C. 1904 [2] 441).
- $C_{17}H_{26}ON_6P$  1) Amylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 122° (A. 326, 174 C. 1903 [1] 819).
- $C_{17}H_{28}ON_3P$  1) Methylphenylamid-1,1'-Dipiperidid d. Phosphorsäure. Sm. 86° (A. 326, 255 C. 1903 [1] 869). — \*IV, 10.
- 2) 2-Methylphenylamid-1,1'-Dipiperidid d. Phosphorsäure. Sm. 146° (A. 326, 197 C. 1903 [1] 821). — \*IV, 10.

- $C_{17}H_{28}N_5SP$  1) 4-Methylphenylmonamid-1,1'-Dipiperidid d. Thiophosphorsäure. Sm. 157° (A. 326, 218 C. 1903 [1] 822).
- $C_{17}H_{32}O_2NCl$  1) Chlormethylat d. Diäthylamidoessigsäurebornylester +  $H_2O$ . Zers. bei 130° (Ar. 240, 651 C. 1903 [1] 399).
- $C_{17}H_{32}O_2NJ$  1) Jodmethylat d. Diäthylamidoessigsäurebornylester. Sm. 194° (Ar. 240, 650 C. 1903 [1] 399).
- $C_{17}H_{34}O_2NCl$  1) Chlormethylat d. Diäthylamidoessigsäurementhylester +  $H_2O$ . Sm. 185° (Ar. 240, 648 C. 1903 [1] 399).
- $C_{17}H_{34}O_2NJ$  1) Jodmethylat d. Diäthylamidoessigsäurementhylester. Sm. 157° (Ar. 240, 647 C. 1903 [1] 399).
- $C_{17}H_{39}N_2J_2P$  1) Methylidi[Diisobutylamido]jodphosphoniumjodid. Sm. 132° (A. 326, 168 C. 1903 [1] 762).

## — 17 V —

- $C_{17}H_{18}ON_2Br_4S$  1) Verbindung (aus Acetyl-sym-Di[2-Methylphenyl]thioharnstoff). Sm. 141° u. Zers. (B. 36, 3130 C. 1903 [2] 1070).

**C<sub>18</sub>-Gruppe.**

- $C_{18}H_{12}$  \*5) Truxen (B. 36, 644 C. 1903 [1] 717; B. 36, 645 C. 1903 [1] 718).
- $C_{18}H_{14}$  \*2) 1,4-Diphenylbenzol. Sm. 205° (B. 36, 1410 C. 1903 [1] 1358).
- \*3) 5,12-Dihydronaphtacen. Sm. 200—204° (B. 36, 553 C. 1903 [1] 720).
- 7)  $\alpha$ -Phenyl- $\alpha$ -(1-Naphtyl)äthen. Sm. 60°; Sd. 350—355° (B. 37, 2757 C. 1904 [2] 707; B. 37, 4167 C. 1904 [2] 1643).
- 8) Kohlenwasserstoff (aus Acetylmagnesiumbromid u. Benzaldehyd). Sm. 213—214° (C. 1904 [2] 943).
- $C_{18}H_{16}$  2) 2-Methyl-7-[4-Methylphenyl]naphtalin. Sm. 140—141° (B. 36, 1873 C. 1903 [2] 286; B. 36, 3909 C. 1903 [2] 1438).
- $C_{18}H_{18}$  \*1) Reten. Sm. 98° (Ar. 240, 571 C. 1903 [1] 163; B. 36, 4200 C. 1904 [1] 288; Ar. 241, 581 C. 1904 [1] 166; M. 25, 452 C. 1904 [2] 450).
- \*4) 1,3,5,7-Tetramethylantracen. Sm. 280° (Soc. 85, 218 C. 1904 [1] 656, 939).
- 8)  $\beta$ -Diphenyl- $\beta$ -Hexadien. Sm. 138° (C. r. 135, 1348 C. 1903 [1] 328).
- 9) Kohlenwasserstoff (aus Abiäten). Sm. 86° (Soc. 85, 1248 C. 1904 [2] 107, 1308).
- $C_{18}H_{22}$  11) 2,4,5,2',4',5'-Hexamethylbiphenyl. Sm. 52°; Sd. 320°<sub>788</sub> (A. 332, 47 C. 1904 [2] 40).
- 12) 2,4,6,2',4',6'-Hexamethylbiphenyl. Sm. 100,5°; Sd. 296°<sub>785</sub> (A. 332, 48 C. 1904 [2] 40).
- $C_{18}H_{28}$  3) Abiäten. Sd. 340—345°<sub>789</sub> (Soc. 85, 1244 C. 1904 [2] 107, 1308).
- $C_{18}H_{30}$  \*1) Dodekahydroreten (Dihydroabiäten). Sd. 330—340° (Soc. 85, 1247 C. 1904 [2] 107, 1308).
- \*4) Hexäthylbenzol (J. pr. [2] 68, 227 C. 1903 [2] 1114).
- $C_{18}H_{34}$  4) Chaulmoogren. Sd. 193—194°<sub>20</sub> (Soc. 85, 859 C. 1904 [2] 348, 604).
- $C_{18}H_{38}$  3) Kohlenwasserstoff (aus Lichesterinsäure). Sd. 190—200° (Ar. 241, 21 C. 1903 [1] 698).

## — 18 II —

- $C_{18}H_8O_4$  \*2) 5,6,11,12-Naphtacendichinon. Sm. 333° (B. 36, 727 C. 1903 [1] 774).
- $C_{18}H_{10}O_8$  \*3) Chrysoketoncarbonsäure. Sm. 283° (A. 335, 119 C. 1904 [2] 1132).
- 7) 11-Oxy-5,12-Naphtacenchinon. Sm. 303° (B. 36, 549 C. 1903 [1] 719).
- 8) Anhydrid d. 2-Phenylnaphtalin-1,2'-Dicarbonsäure. Sm. 146° (A. 335, 118 C. 1904 [2] 1132).
- $C_{18}H_{10}O_4$  \*3) Isoäthindiphtalid. Sm. 345—347° (300°?) (D.R.P. 138324, 138325 C. 1903 [1] 371; B. 36, 721 C. 1903 [1] 773; B. 36, 2328 C. 1903 [2] 442).
- \*4) 2,2'-Bi-1,3-Diketo-2,3-Dihydroinden. Sm. noch nicht bei 320° (B. 35, 3960 C. 1903 [1] 32).
- $C_{18}H_{10}O_6$  5) 6,11,12-Trioxy-5,12-Diketo-5,12-Dihydroacenaphten (B. 36, 2329 C. 1903 [2] 442).
- 6) 6,8,11-Trioxy-5,12-Naphtacenchinon? (B. 36, 725 C. 1903 [1] 774).

- $C_{18}H_{10}O_5$   
 $C_{18}H_{10}O_{11}$
- 7) *p*-Trioxynaphtacenchinon. Sm. 300° (*B.* 36, 727 *C.* 1903 [1] 774).  
 C 53,7 — H 2,5 — O 43,8 — M. G. 402.
- 1) Diphenylketon-2,4,6,3',5'-Pentacarbonsäure. Sm. 350—355° (*B.* 33, 343). — \*II, 1231.
- $C_{18}H_{12}O_2$   
 $C_{18}H_{12}O_8$
- 7) 1,2-Dioxychrysen. Sm. 152—154° (D.R.P. 151981 *C.* 1904 [2] 167).
- \*7) Anhydrid d.  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm. 203 bis 204° (*B.* 37, 2244 *C.* 1904 [2] 328; *B.* 37, 2465 *C.* 1904 [2] 329).
- $C_{18}H_{12}O_4$
- \*13) Hydrodicumarin. Sm. 262° (*B.* 35, 4130 *C.* 1903 [1] 160).
- \*18) 2-Phenylnaphtalin-1,2<sup>2</sup>-Dicarbonsäure. Sm. 199°.  $Ag_2$  (*A.* 335, 114 *C.* 1904 [2] 1132).
- 19)  $\alpha\gamma$ -Diketo- $\beta$ -Phtalyl- $\alpha$ -Phenylbutan (Phtalylbenzoylacetone). Sm. 175° (*B.* 37, 579 *C.* 1904 [1] 939).
- 20) Biscumarin. Sm. noch nicht bei 275° (*B.* 37, 1385 *C.* 1904 [1] 1344).
- 21) 2-[1-Oxy-2-Naphtoyl]benzol-1-Carbonsäure. Sm. 186°; Sd. 265 bis 270° (*B.* 36, 554 *C.* 1903 [1] 720).
- 22) 1-[1-Oxy-2-Naphtoyl]benzol-2-Carbonsäure (D.R.P. 134985 *C.* 1902 [2] 1085; D.R.P. 141025 *C.* 1903 [1] 1197).
- 23) Phenanthroxylencetessigsäure. Sm. 188° (*M.* 17, 344). — \*II, 1105.
- $C_{18}H_{12}O_5$
- \*1) Calycin (*C.* 1903 [2] 121).
- \*6) Verbindung (aus Formononetin) (*M.* 24, 148 *C.* 1903 [1] 1033).
- 7) Lakton d. 4-Oxy-7-Acetoxy-2-Phenyl-1,4-Benzpyran-4-Carbonsäure. Sm. 157,5—158° (*B.* 36, 1949 *C.* 1903 [2] 296).
- $C_{18}H_{12}O_6$
- \*3) Diacetat d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 184° (*B.* 36, 4021 *C.* 1904 [1] 184).
- \*9) Diacetat d. 2,3-Dioxy-9,10-Naphtochinon. Sm. 206—207° (*B.* 36, 2939 *C.* 1903 [2] 886).
- 18) Dimethyläther d. Dioxybisbenzaronyl. Sm. 310° (*Soc.* 83, 1132 *C.* 1903 [2] 1059).
- 19) Diacetat d. 2,7-Dioxy-9,10-Phenanthrenchinon. Sm. 235—236° u. Zers. (*B.* 36, 3742 *C.* 1904 [1] 37).
- $C_{18}H_{12}N_2$
- \*5) 2,7'-Bichinolyl. Sm. 191—192° (*B.* 37, 1243 *C.* 1904 [1] 1362).
- \*6) 6,6'-Bichinolyl. Sm. 181° (*A.* 332, 80 *C.* 1904 [2] 43).
- $C_{18}H_{12}N_4$   
 $C_{18}H_{12}J_2$
- \*5) Naphtofluoavin (*B.* 36, 4047 *C.* 1904 [1] 184).
- 1) Di[3 - Jodphenyl]-1,3 - Phenylendijodoniumjodid. Zers. bei 140° (*B.* 37, 1310 *C.* 1904 [1] 1340).
- $C_{18}H_{18}N_3$
- 8) Nitril d.  $\alpha$ -Phenylimido- $\alpha$ -[1-Naphtyl]amidoessigsäure. Sm. 121° (D.R.P. 153418 *C.* 1904 [2] 679).
- 9) Nitril d.  $\alpha$ -Phenylimido- $\alpha$ -[2-Naphtyl]amidoessigsäure. Sm. 146° (D.R.P. 153418 *C.* 1904 [2] 679).
- $C_{18}H_{18}Br$
- 3)  $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[1-Naphtyl]äthen. Sm. 71—72°; Sd. 240—260°, <sub>16</sub> (*B.* 37, 2757 *C.* 1904 [2] 707; *B.* 37, 4167 *C.* 1904 [2] 1643).
- 4) isom.  $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[1-Naphtyl]äthen. Sm. 54° (*B.* 37, 4168 *C.* 1904 [2] 1643).
- $C_{18}H_{14}O$
- 5) Aether d.  $\gamma$ -Oxy- $\gamma$ -Phenylpropin. Sd. 155—160°, <sub>10</sub> (*C.* 1904 [2] 943).
- 6) 2-Oxy-1,4-Diphenylbenzol. Sm. 194°; Sd. 260° (*B.* 36, 1408 *C.* 1903 [1] 1358).
- $C_{18}H_{14}O_2$
- 9) Methylester d. 2-Phenylnaphtalin-1-Carbonsäure. Sm. 75° (*A.* 335, 131 *C.* 1904 [2] 1134).
- 10) Methylester d. 2-Phenylnaphtalin-2<sup>2</sup>-Carbonsäure. Sm. 63° (*A.* 335, 131 Anm. *C.* 1904 [2] 1134).
- $C_{18}H_{14}O_3$
- 26) Lakton d. *s*-Keto- $\gamma$ -Oxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Penten-*s*-Carbonsäure. Sm. 179° (*A.* 333, 267 *C.* 1904 [2] 1392).
- $C_{18}H_{14}O_4$
- \*5)  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm. 218° u. Zers. +  $(CH_3)_2O$  +  $C_2H_4O_2$ .  $Na_2$  +  $H_2O$ , 4Ba + 7 $H_2O$ ,  $Ag_2$ , Piperidinsalz (*B.* 37, 2241 *C.* 1904 [2] 328).
- 33)  $\alpha\gamma$ -Diketo- $\beta$ -Phtalidyl- $\alpha$ -Phenylbutan. Sm. 119° (*B.* 37, 586 *C.* 1904 [1] 940).
- 34)  $\alpha\gamma$ -Lakton d.  $\gamma$ -Oxy- $\beta$ -Benzoxyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 100° (*B.* 36, 2256 *C.* 1903 [2] 437).
- 35) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\beta$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 115° (*A.* 333, 231 *C.* 1904 [2] 1389).
- 36) Diacetat d.  $\alpha\beta$ -Di[4-Oxyphenyl]äthin. Sm. 198° (*A.* 335, 185, 187 *C.* 1904 [2] 1130).

- $C_{18}H_{14}O_4$  37) Diacetat d. 1,2-Dioxyanthracen. Sm. 145° (*B.* 36, 4021 *C.* 1904 [1] 168).  
 38) Verbindung (aus Acenaphtenchinon u. Acetessigsäureäthylester). Sm. 150° (*G.* 32 [2] 366 *C.* 1903 [1] 639).
- $C_{18}H_{14}O_5$  15) 2<sup>3</sup>, 2<sup>4</sup>-Methylenäther-6-Aethyläther d. 6-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 205° (*B.* 33, 329). — \*III, 566.  
 16) 4-Acetoxy-3-Methoxyphenanthren-9-Carbonsäure. Sm. 244° (*B.* 35, 4414 *C.* 1903 [1] 344).  
 17) 3-Acetate d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron-6-Methyläther. Sm. 164—166° (*B.* 37, 777 *C.* 1904 [1] 1156).  
 18) 3-Acetate d. 3,7-Dioxy-2-Phenyl-1,4-Benzpyron-7-Methyläther. Sm. 140° (*B.* 37, 1181 *C.* 1904 [1] 1275).
- $C_{18}H_{14}O_6$  \*2) 4-Acetate d. 3,4,6-Trioxyphenanthrenchinon-3,6-Dimethyläther (Acetylthebaolchinon). Sm. 208° (corr.) (*B.* 35, 4410 *C.* 1903 [1] 343).  
 13) Dimethyläther d. Dioxybisketocumaran. Sm. 166° (*Soc.* 83, 1133 *C.* 1903 [2] 1060).  
 14) Acetate d. 1,2,3-Trioxo-9,10-Anthrachinondimethyläther. Sm. 167° (*M.* 23, 1016 *C.* 1903 [1] 291).
- $C_{18}H_{14}N_2$  \*3) 4-Phenylazobenzol. Sm. 151° (*C.* 1904 [1] 1491).  
 \*7) Nitril d.  $\alpha$ -[1-Naphtyl]amido- $\alpha$ -Phenyllessigsäure. Sm. 106° (*D.R.P.* 144536 *C.* 1903 [2] 779; *B.* 37, 4080 *C.* 1904 [2] 1722).
- $C_{18}H_{15}N$  9) 2-Phenyl-6-[4-Methylphenyl]pyridin. Sm. 89° (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 36, 847 *C.* 1903 [1] 975).
- $C_{18}H_{15}N_3$  12) Diphenyldiazoamidobenzol. Sm. 47°. HCl (*C. r.* 138, 1104 *C.* 1904 [1] 1595).
- $C_{18}H_{15}P$  \*1) Triphenylphosphin. Sm. 79° (*C. r.* 139, 675 *C.* 1904 [2] 1638).
- $C_{18}H_{16}O$  \*1) 1-Keto-3,5-Diphenyl-1,2,3,4-Tetrahydrobenzol. Sm. 82—83° (*B.* 36, 2133 *C.* 1903 [2] 366).  
 5) *s*-Keto- $\alpha$ -Phenyl- $\alpha$ -[4-Methylphenyl]- $\alpha\gamma$ -Pentadien. Sm. 89° (*B.* 36, 846 *C.* 1903 [1] 975).  
 6) *s*-Keto- $\alpha$ -Phenyl- $\alpha$ -[4-Methylphenyl]- $\alpha\gamma$ -Pentadien. Sm. 100° (*B.* 36, 851 *C.* 1903 [1] 975).
- $C_{18}H_{16}O_2$  \*4) Retenchinon (*B.* 36, 4202 *Ann.* *C.* 1904 [1] 289).  
 \*10) 1-Oxy-3-Keto-4-Methyl-1,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 118° (133,5°) (*Soc.* 83, 276 *C.* 1903 [1] 569, 877; *Soc.* 83, 289 *C.* 1903 [1] 569, 877).  
 13) Dimethyläther d. 3,4-Dioxy-2-Aethenylphenanthren. Sm. 80°. Pikrat (*B.* 35, 4391 *C.* 1903 [1] 339).  
 14) Methyläther d. *s*-Keto- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]- $\alpha\gamma$ -Pentadien. Sm. 118° (*B.* 36, 854 *C.* 1903 [1] 976).  
 15)  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Pentadien-*s*-Carbonsäure. Sm. 190°. + C<sub>6</sub>H<sub>6</sub> (Sm. 140°), Ag (*B.* 36, 1407 *C.* 1903 [1] 1358).  
 16) Laktone d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyl- $\gamma$ -Methyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Sm. 105—106° (*Soc.* 83, 308 *C.* 1903 [1] 879).  
 17) Methylster d.  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 82—83° (*J. pr.* [2] 68, 527 *C.* 1904 [1] 451).
- $C_{18}H_{18}O_3$  \*2) Methyläther d. Thebenol. Sm. 135° (*B.* 37, 2790 *C.* 1904 [2] 716).  
 \*7) Aethylster d. Benzylidenbenzoylessigsäure. Sm. 98—99° (*Soc.* 83, 720 *C.* 1903 [2] 54; *G.* 33 [2] 146 *C.* 1903 [2] 1270).  
 16) Anhydrid d. cis- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 104° (*B.* 37, 2666 *C.* 1904 [2] 524).  
 17) Anhydrid d. trans- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 155° (*B.* 37, 2667 *C.* 1904 [2] 524).
- $C_{18}H_{16}O_4$  \*2) 7-Oxy-4-Methylen-5-Methyl-2-[4,6-Dioxy-2-Methylphenyl]-1,4-Benzpyran (Orcacetein) (*B.* 36, 733 *C.* 1903 [1] 840).  
 \*18)  $\beta$ -Isoatropasäure ( $\beta$ -Isococasäure). + C<sub>6</sub>H<sub>6</sub> (*J. pr.* [2] 66, 420 *C.* 1903 [1] 528).  
 \*20)  $\alpha$ -Truxillsäure (Cocasäure). Sm. 266—267° (*J. pr.* [2] 66, 419 *C.* 1903 [1] 528).  
 \*32) Diacetate d.  $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 213° (*A.* 335, 189 *C.* 1904 [2] 1131).  
 \*44) Diacetate d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthen. Sm. 118° (*Am.* 29, 607 *C.* 1903 [2] 198).

- $C_{18}H_{16}O_4$  47)  $\delta$ -Keto- $\beta\gamma$ -Diphenylpentan- $\beta\gamma$ -Oxyd- $\alpha$ -Carbonsäure. Sm. 131—132° u. Zers. Ag (Soc. 83, 291 C. 1903 [1] 877).  
 48)  $\beta\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha\gamma$ -Dicarbonsäure (Soc. 75, 250). — \*II, 1101.  
 49)  $\alpha\gamma$ -Diketo- $\beta$ -Phtalidyl- $\alpha$ -Phenylbutan- $\beta^2$ -Carbonsäure. Sm. 136° (B. 37, 587 C. 1904 [1] 940).  
 50) Dibenzylester d. Fumarsäure. Sm. 64°; Sd. 239°<sub>14</sub> (B. 35, 4089 C. 1903 [1] 75).  
 51) Dibenzylester d. Maleinsäure. Sd. 241°<sub>14</sub> (B. 35, 4090 C. 1903 [1] 75).  
 52)  $\gamma$ -Acetat d.  $\alpha\gamma$ -Dioxy- $\delta$ -Keto- $\alpha\epsilon$ -Diphenyl- $\alpha$ -Buten. Sm. 98° (B. 36, 2419 C. 1903 [2] 501).  
 53) Diacetat d. Verbindung  $C_{14}H_{12}O_2$  (A. 325, 28 C. 1903 [1] 460).
- $C_{18}H_{16}O_5$  \*19) Ononetin (M. 25, 566 C. 1904 [2] 907).  
 21) 3,4,6-Trioxypheanthrentrimethyläther-9-Carbonsäure. Sm. 203° (B. 35, 4406 C. 1903 [1] 342).  
 22)  $p$ -Trioxypheanthrencarbontrimethyläthersäure. Sm. 219—221° (B. 37, 2790 C. 1904 [2] 716).  
 23) Äthylester d. 4,7-Dioxy-2-Phenyl-1,4-Benzpyran-4-Carbonsäure. Pikrat (B. 36, 1950 C. 1903 [2] 296).  
 24) Diacetat d.  $\alpha$ -Keto- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 125° (A. 325, 76 C. 1903 [1] 463).
- $C_{18}H_{16}O_6$  13) 2<sup>3</sup>, 2<sup>4</sup>, 6 - Trimethyläther d. 3,6-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 189—190° (B. 37, 780 C. 1904 [1] 1156).  
 14) 2<sup>4</sup>, 5, 7-Trimethyläther d. 3,5,7-Trioxo-2-[4-Oxyphenyl]-1,4-Benzpyron +  $H_2O$ . Sm. 151—152° (wasserfrei) (B. 37, 2098 C. 1904 [2] 121).  
 15) 2<sup>3</sup>, 7, 8-Trimethyläther d. 3,7,8-Trioxo-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 212—214° (B. 37, 2630 C. 1904 [2] 539).  
 16) 2<sup>3</sup>, 7, 8-Trimethyläther d. 3,7,8-Trioxo-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 188—189° (B. 37, 2633 C. 1904 [2] 540).  
 17) bim. o-Cumarsäure. Sm. noch nicht bei 275° (B. 37, 1384 C. 1904 [1] 1343).
- $C_{18}H_{16}O_7$  \*2) d-Usninsäure. Sm. 191,4° (C. 1903 [2] 121; A. 325, 341 C. 1903 [1] 722).  
 \*4) Usnolsäure. Sm. 206—210° (J. pr. [2] 68, 7 C. 1903 [2] 510).  
 \*6) l-Usninsäure. Sm. 191,4° (A. 325, 341 C. 1903 [1] 722).  
 \*7) i-Usninsäure (A. 325, 339 C. 1903 [1] 722).  
 9) Trimethyläther d. Quercetin. Sm. 154° (Ar. 242, 241 C. 1904 [1] 1652).
- $C_{18}H_{16}O_8$  \*2) Tetramethyläther d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm. 235—237° (C. 1904 [2] 709).
- $C_{18}H_{16}N_2$  \*7) 4-Phenyl-s-Diphenylhydrazin. Sm. 122° (C. 1904 [1] 1491).
- $C_{18}H_{16}N_4$  5) 3,6-Dimethyl-1,4-Diphenylbipyrazol. Sm. 163° (B. 36, 528 C. 1903 [1] 642).
- $C_{18}H_{16}J_2$  1) 4-Äthylphenyl-1-Naphtyljodoniumjodid. Sm. 48° (A. 327, 299 C. 1903 [2] 352).
- $C_{18}H_{18}O_2$  22)  $\beta$ -Keto- $\gamma\delta$ -Diphenylhexan- $\gamma\delta$ -Oxyd. Sm. 98—99° (Soc. 83, 297 C. 1903 [1] 878).  
 23) o-Dioxyreten (D.R.P. 151981 C. 1904 [2] 167).  
 24) Phenyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Hexen. Sm. 55°; Sd. 206 bis 209°<sub>11</sub> (C. r. 139, 210 C. 1904 [2] 649).  
 25) Lakton d.  $\delta$ -Oxy- $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm. 106° (Soc. 83, 311 C. 1903 [1] 880).  
 26) Benzcoat d.  $\gamma$ -[2-Oxyphenyl]- $\beta$ -Penten. Sd. 212—213,5°<sub>90</sub> (Bl. [3] 29, 354 C. 1903 [1] 1222).
- $C_{18}H_{18}O_3$  20) 2-Methoxyphenyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Penten. Sm. 76—77°; Sd. 231°<sub>17</sub> (C. r. 139, 210 C. 1904 [2] 649).  
 21)  $\delta$ -Keto- $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure ( $\alpha$ -Desylisobuttersäure). Sm. 218° u. Zers. Ag (Soc. 83, 309 C. 1903 [1] 879).
- $C_{18}H_{18}O_4$  \*11) Dimethylester d.  $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure. Sm. 103° (B. 37, 3219 C. 1904 [2] 1120).  
 \*20) Dibenzylester d. Bernsteinsäure. Sm. 45°; Sd. 238°<sub>14</sub> (B. 35, 4078 C. 1903 [1] 74).

- $C_{18}H_{18}O_4$  39) Tetramethyläther d.  $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthin. Sm. 156° (A. 329, 45 C. 1903 [2] 1448).  
 40) Ceropten. Sm. 135° (C. 1904 [1] 39).  
 41) r- $\alpha$ -Oxyphenylessigeugenoläthersäure. Sm. 101—102° (D.R.P. 82924). — \*II, 923.  
 42) r- $\alpha$ -Oxyphenylessigeugenoläthersäure. Sm. 91—92° (D.R.P. 82924). — \*II, 923.  
 43) l-Oxymethylbenzoleugenoläther-4-Carbonsäure. Sm. 141° (D.R.P. 82924). — \*II, 927.  
 44) l-Oxymethylbenzoleugenoläther-4-Carbonsäure. Sm. 185° (D.R.P. 82924). — \*II, 927.  
 45) cis- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 203° u. Zers. (C. 1900 [2] 562; B. 37, 2666 C. 1904 [2] 524). — \*II, 1098.  
 46) trans- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 204° (B. 37, 2667 C. 1904 [2] 524). — \*II, 1098.  
 47) Dimethylester d.  $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. Sm. 119° (B. 37, 3216 C. 1904 [2] 1120).  
 48) Äthylester d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-3-Methoxyphenyläthersäure. Sd. 232—234°<sub>12</sub> (Soc. 83, 1134 C. 1903 [2] 1060).  
 49) Di[2-Methylphenylester] d. Bernsteinsäure. Sd. 238—240°<sub>5</sub> (B. 35, 4079 C. 1903 [1] 74).  
 50) Di[3-Methylphenylester] d. Bernsteinsäure. Sm. 60° (B. 35, 4080 C. 1903 [1] 74).  
 51) Di[4-Methylphenylester] d. Bernsteinsäure. Sm. 121° (B. 35, 4080 C. 1903 [1] 74).
- $C_{18}H_{18}O_5$  12) Dimethylenäther d. Di[ $\alpha$ -3,4-Dioxyphenyläthyl]äther. Sm. 111° (Bl. [3] 25, 275; G. 34 [1] 372 C. 1904 [2] 214; G. 34 [2] 171 C. 1904 [2] 648, 982).  
 13)  $\alpha^2, \gamma^3, \gamma^4$ -Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[2-Oxyphenyl]- $\gamma$ -[2,3,4-Trioxyphe-nyl]propen. Sm. 105° (B. 37, 2628 C. 1904 [2] 539).  
 14)  $\alpha^3, \gamma^3, \gamma^4$ -Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[3-Oxyphenyl]- $\gamma$ -[2,3,4-Trioxyphe-nyl]propen. Sm. 127—128° (B. 37, 2631 C. 1904 [2] 539).  
 15)  $\alpha^4, \gamma^2, \gamma^4$ -Trimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphe-nyl]- $\alpha$ -[4-Oxyphenyl]propen. Sm. 113° (B. 37, 792 C. 1904 [1] 1158).  
 16) Trimethyläther d. 6-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 175—176° (B. 37, 779 C. 1904 [1] 1156).  
 17) Trimethyläther d. 5,7-Dioxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 125° (B. 37, 2097 C. 1904 [2] 121).  
 18) Trimethyläther d. 7,8-Dioxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 112° (B. 37, 2629 C. 1904 [2] 539).  
 19) Trimethyläther d. 7,8-Dioxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 79° (B. 37, 2632 C. 1904 [2] 539).  
 20) Trimethyläther d. Butein. Sm. 156—158° (C. 1904 [2] 451).  
 21) Trimethyläther d. Butin. Sm. 119—121° (C. 1904 [2] 451).
- $C_{18}H_{18}O_6$  \*11) Di[2-Methoxyphenylester] d. Bernsteinsäure. Sm. 135° (B. 35, 4083 C. 1903 [1] 74).  
 16) Tetramethyläther d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 219—220° (A. 329, 53 C. 1903 [2] 1448).  
 17)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenylbutan- $\alpha\gamma$ -Dicarbonsäure. Ag<sub>2</sub> (Soc. 83, 293 C. 1903 [1] 877).  
 18)  $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenylbutan-2,2'-Dicarbonsäure (o-Aethylenbenzhydrylcarbonsäure) (B. 10, 2209; 31, 1579). — II, 2023; \*II, 1182.
- $C_{18}H_{18}O_8$  4) Usnidinsäure + 2H<sub>2</sub>O. Sm. 195° u. Zers. (J. pr. [2] 63, 526). — \*II, 1205.
- $C_{18}H_{18}N_2$  9) l-Diphenylmethyl-3,5-Dimethylpyrazol. Sm. 108—109° (J. pr. [2] 67, 172 C. 1903 [1] 874).
- $C_{18}H_{18}N_6$  \*1) l,4-Di[2,5-Diamidophenyl]-1,4-Azophenylen. Sm. 238—238,5° u. Zers. (B. 37, 1506 C. 1904 [1] 1414).
- $C_{18}H_{20}O$  6) Benzyläther d.  $\gamma$ -[2-Oxyphenyl]- $\beta$ -Penten. Sd. 192—193°<sub>19</sub> (Bl. [3] 29, 354 C. 1903 [1] 1222).
- $C_{18}H_{20}O_2$  \*10) Benzoat d. 4-Oxy-1-tert. Amylbenzol. Sm. 60° (A. 327, 220 C. 1903 [1] 1408).  
 17)  $\alpha\beta$ -Di[4-Oxy-2,5-Dimethylphenyl]äthen. Sm. 320—330° (B. 36, 1892 C. 1903 [2] 291).

- $C_{18}H_{20}O_2$  18)  $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm. 172°. Ag (*Soc.* 83, 313 *C.* 1903 [1] 880).
- $C_{18}H_{20}O_3$  \*5)  $\alpha$ -Benzoat d. Oxymethylencampher (*C. r.* 136, 1223 *C.* 1903 [2] 116).  
 11) Methylenäther d. d-3,4-Dioxybenzylidencampher. Sm. 159° (*C. r.* 128, 1273; 130, 222). — \*III, 389.  
 12)  $\delta$ -Oxy- $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure (*Soc.* 83, 312 *C.* 1903 [1] 880).  
 13) Aldehyd d. 3,4-Dioxybenzol-3-Isobutyläther-4-Benzyläther-1-Carbonsäure. Sm. 42,5° (D.R.P. 85196). — \*III, 75.
- $C_{18}H_{20}O_5$  5) Tetramethyläther d.  $\alpha$ -Keto- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 108° (*A.* 329, 48 *C.* 1903 [2] 1448).
- $C_{18}H_{20}O_{10}$  3) Diäthylester d. 2,4,6-Triacetoxybenzol-1,3-Dicarbonsäure. Sm. 96° (75–76°) (*B.* 21, 1768; *Soc.* 85, 167 *C.* 1904 [1] 163, 722).  
 4) Pentaacetat d. 2,4,6-Trioxy-3-Dioxymethyl-1-Methylbenzol. Sm. 144–145° (*M.* 24, 878 *C.* 1904 [1] 369).
- $C_{18}H_{20}N_2$  8) 1-[ $\alpha$ -Phenylimidobenzyl]hexahydropyridin. Fl. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 37, 2684 *C.* 1904 [2] 521).
- $C_{18}H_{21}N$  2) 2-Phenyl-6-[4-Methylphenyl]hexahydropyridin. Sm. 41,5°; Sd. 237 bis 239°<sub>44</sub>. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HBr, HJ, H<sub>2</sub>SO<sub>4</sub>, Pikrat (*B.* 36, 848 *C.* 1903 [1] 975).  
 3) isom. 2-Phenyl-6-[4-Methylphenyl]hexahydropyridin. Sd. 218 bis 220°<sub>30</sub>. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HBr, Pikrat (*B.* 36, 849 *C.* 1903 [1] 975).
- $C_{18}H_{21}J_3$  1)  $\beta$ -Joddi[4-Propylphenyl]jodoniumjodid. Sm. 38° u. Zers. (*A.* 327, 316 *C.* 1903 [2] 354).  
 2)  $\beta$ -Jod-4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumjodid. Sm. 145° u. Zers. (*J. pr.* [2] 69, 442 *C.* 1904 [2] 589).
- $C_{18}H_{22}O_2$  \*2) 5,5'-Dioxy-1,2,4,1',2',4'-Hexamethyl- $\beta$ -Biphenyl. Sm. 172,5–173,5° (*B.* 36, 2038 *C.* 1903 [2] 360).  
 \*3) Diäthyläther d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 154° (*Am.* 31, 125 *C.* 1904 [1] 809).  
 \*5) Diphenyläther d.  $\alpha\zeta$ -Dioxyhexan. Sm. 83° (*C. r.* 136, 97 *C.* 1903 [1] 455).  
 15) Methyläther d. i-4-Oxybenzylidencampher. Sm. 99° (*C. r.* 132, 1574). — \*III, 389.
- $C_{18}H_{22}O_3$  4) 3,4-Methylenäther d. 3-Keto-2-[3,4-Dioxybenzyliden]-4-Isopropyl-1-Methylhexahydrobenzol. Sd. oberh. 220°<sub>15</sub> u. Zers. (*C.* 1904 [2] 1046).  
 5) d-Bornylester d. Benzolketocarbonsäure. Sm. 78° (*P. Ch. S.* No. 230). — \*III, 338.
- $C_{18}H_{22}O_4$  15) l-Monolinaloolester d. Benzol-1,2-Dicarbonsäure. Fl. (*B.* 31, 839). — \*III, 346.
- $C_{18}H_{22}O_5$  \*4) Aethylester d. isom. s-Acetyl- $\beta\zeta$ -Diketo- $\delta$ -Phenylheptan- $\gamma$ -Carbonsäure. Sm. 123° (*B.* 36, 2152 *C.* 1903 [2] 369).
- $C_{18}H_{22}O_6$  3) Triäthylester d.  $\theta$ -Acetoxybenzol-1,3-Dicarbonsäure-4-Methylcarbonsäure. Sm. 59° (*B.* 37, 2120 *C.* 1904 [2] 438).  
 4) Tetraacetat d. 2,3,5,6-Tetraoxy-1,4-Diäthylbenzol. Sm. 213° (*B.* 37, 2387 *C.* 1904 [2] 307).
- $C_{18}H_{22}N_2$  \*16)  $\alpha$ -Phenylimido- $\gamma$ -Phenylamido- $\beta$ -Methylpentan. HCl, 2HCl (*A.* 329, 215 *C.* 1903 [2] 1427).  
 24) 1,4-Anhydrid d. 4-Aethylamido-1-Oxymethylbenzol. Sm. 79–80°. 2HCl (*M.* 23, 990 *C.* 1903 [1] 289).  
 25) 2,5-Dimethylbenzyliden-2,5-Dimethylbenzylhydrazin. Sm. 74–78° (*C.* 1903 [1] 141).
- $C_{18}H_{22}N_4$  14) Di[2-Dimethylamidobenzyliden]hydrazin. Sm. 148–149° (*M.* 25, 373 *C.* 1904 [2] 322).
- $C_{18}H_{22}J_2$  2) Di[4-Propylphenyl]jodoniumjodid. Sm. 135–140°. + J<sub>2</sub> (*A.* 327, 311 *C.* 1903 [2] 353).  
 3) 4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumjodid (*J. pr.* [2] 69, 440 *C.* 1904 [2] 589).
- $C_{18}H_{23}N$  2) Isobutylidibenzylamin. Sd. 170–173°<sub>10</sub> (*Soc.* 83, 1413 *C.* 1904 [1] 438).  
 3) Di[2,5-Dimethylbenzyl]amin. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, Pikrat (*C.* 1903 [2] 1441).

- $C_{18}H_{25}N_3$  4) 4-[4-Methyläthylamidobenzyliden]amido-1-Dimethylamidobenzol. Sm. 216° (B. 37, 861 C. 1904 [1] 1206).  
 5) Verbindung (aus Silicotetraphenylamid u. Senfölen). (2HCl, PtCl<sub>4</sub>) (Soc. 83, 258 C. 1903 [1] 572, 875).
- $C_{18}H_{24}O_2$  5) Methyläther d. 1-3-Keto-2-[4-Oxybenzyliden]-4-Isopropyl-1-Methylhexahydrobenzol (1-Anisylidenmenthon). Sm. 115—116° (C. 1904 [2] 1046).
- $C_{18}H_{24}O_3$  7) 1-Menthylester d. Benzolketocarbonsäure. Sm. 73—74° (Soc. 85, 1254 C. 1904 [2] 1304).
- $C_{18}H_{24}O_4$  8) α-Dicamphylsäure. Sm. 230°. Ca + 2H<sub>2</sub>O, Ag<sub>2</sub> (Soc. 83, 862 C. 1903 [2] 573).
- $C_{18}H_{24}O_5$  7) Dioxy-α-Dicamphylsäure. Sm. 255—257° u. Zers. Ag (Soc. 83, 864 C. 1903 [2] 573).  
 8) αγ-Dibutyrat-β-Benzooat d. αβγ-Trioxypuran. Fl. (C. 1903 [1] 134).
- $C_{18}H_{24}O_7$  3) Diäthylester d. 3,5-Diäthoxyphenoxylfumar säure. Sd. 238—240°<sub>15</sub> (Soc. 83, 1134 C. 1903 [2] 1060).
- $C_{18}H_{26}O_2$  10) Benzoat d. β-Oxy-α-oder-β-Undeken. Sd. 233—235°<sub>50</sub> (Soc. 83, 149 C. 1903 [1] 71, 436).
- $C_{18}H_{26}O_3$  3) 1-Menthylester d. d-α-Oxyphenylelessigsäure. Sm. 99—100° (Soc. 85, 1254 C. 1904 [2] 1304).  
 4) 1-Menthylester d. l-α-Oxyphenylelessigsäure. Sm. 81—82° (Soc. 85, 1254 C. 1904 [2] 1304).  
 5) 1-Menthylester d. r-α-Oxyphenylelessigsäure. Sm. 85—86°; Sd. 225°<sub>50</sub> (Soc. 85, 383 C. 1904 [1] 940, 1419).
- $C_{18}H_{26}O_4$  7) Diacetat d. αγ-Dioxy-α-[4-Isopropylphenyl]-β-Methylpropan. Sm. 182°<sub>10,5</sub> (M. 24, 254 C. 1903 [2] 242).
- $C_{18}H_{26}O_{12}$  9) d-Idithexacetat. Sm. 121° (C. 1904 [2] 1291).
- $C_{18}H_{28}O$  \*2) Undekylphenylketon (C. 1904 [1] 1259).
- $C_{18}H_{28}O_2$  8) Acetat d. Verb. C<sub>18</sub>H<sub>28</sub>O (aus Caryophyllen u. Formaldehyd). Sd. 185°<sub>15</sub> (C. r. 138, 1228 C. 1904 [2] 106).
- $C_{18}H_{28}O_4$  2) Säure (aus α-Camphylsäure). Sd. 270—290°<sub>45</sub> (Soc. 83, 855 C. 1903 [2] 572).  
 3) Äthylester d. Isovalerylcamphocarbonsäure. Sd. 174—176°<sub>18</sub> (B. 35, 4037 C. 1903 [1] 82).  
 4) Isamylester d. Acetylcamphocarbonsäure. Sd. 170—171°<sub>10,5</sub> (B. 35, 4036 C. 1903 [1] 81).
- $C_{18}H_{28}O_6$  5) Äthylester d. 6-Keto-4-[α-Acetoxyisopropyl]hexahydrobenzol-2-Acetessigsäure (Acetat d. Oxyterpanonylacetessigsäureäthylester). Sm. 133° (B. 37, 1669 C. 1904 [1] 1606).
- $C_{18}H_{28}O_{10}$  3) Barringtonin. Zers. oberh. 200° (C. 1903 [2] 841).
- $C_{18}H_{28}N_2$  3) 1,3-Di[1-Piperidylmethyl]benzol. Fl. 2HCl, (2HCl, PtCl<sub>4</sub>), 2 Pikrat (B. 36, 1677 C. 1903 [2] 29).
- $C_{18}H_{30}O$  6) Verbindung (aus Asclepias syriaca L.) (J. pr. [2] 68, 407 C. 1904 [1] 105).
- $C_{18}H_{30}O_3$  6) Methyläthylakrylat d. Glykol C<sub>12</sub>H<sub>22</sub>O<sub>2</sub>. Sd. 198—205°<sub>11</sub> (M. 24, 160 C. 1903 [1] 957).  
 C 69,7 — H 9,7 — O 20,6 — M. G. 310.
- $C_{18}H_{30}O_4$  1) Dihydroembeliasäure. Sm. 116—117° (Ar. 238, 22). — \*II, 1235.
- $C_{18}H_{30}O_5$  \*2) α-Lichesterinsäure (J. pr. [2] 68, 33 C. 1903 [2] 512).  
 \*4) γ-Lichesterinsäure (J. pr. [2] 68, 36 C. 1903 [2] 512).  
 6) Proto-α-Lichesterinsäure. Sm. 106—107°. Ba, Ag (J. pr. [2] 68, 29 C. 1903 [2] 511).
- $C_{18}H_{32}O_2$  \*3) Leinölsäure (C. r. 137, 69 C. 1903 [2] 552).  
 10) Chaulmoograsäure. Sm. 68°, Sd. 247—248°<sub>20</sub>. NH<sub>4</sub>, K, Mg + 2H<sub>2</sub>O, Ca, Sr, Ba, Zn, Pb, Mn, Fe, Cu, Ag (Soc. 85, 846 C. 1904 [2] 348, 603; Soc. 85, 851 C. 1904 [2] 348, 604).  
 11) Elaeomargarinsäure. Sm. 43—44° (Soc. 83, 1042 C. 1903 [2] 657).  
 12) Lakton d. Lichesterylsäure. Sm. 41—42° (Ar. 241, 8 C. 1903 [1] 697).  
 13) 1-Bornylester d. Caprylsäure. Sd. 175°<sub>15</sub> (B. 31, 1775). — \*III, 339.  
 14) Verbindung (aus Chaulmoograsamen). Sd. 214—215°<sub>18</sub> (Soc. 85, 842 C. 1904 [2] 604).
- $C_{18}H_{32}O_4$  \*1) Stearoxylsäure. Sm. 83—84° (B. 36, 2660 C. 1903 [2] 826).
- $C_{18}H_{32}O_6$  7) Triäthylester d. βζ-Dimethylheptan-γγδ-Tricarbonsäure. Sd. 188 bis 190°<sub>15</sub> (Am. 30, 240 C. 1903 [2] 935).

- $C_{18}H_{34}O$  \*2)  $\kappa$ -Keto- $\eta$ -Methyl- $\theta$ -Oktadeken. *Sd.* 184—187°<sub>14</sub> (*B.* 36, 2558 *C.* 1903 [2] 655).
- $C_{18}H_{34}O_2$  3) Chaulmoogrylalkohol. *Sm.* 36° (*Soc.* 85, 857 *C.* 1904 [2] 348, 604).
- \*2) Elaïdinsäure (*C.* 1903 [1] 319).
- \*3) Oelsäure (*C.* 1903 [1] 319; 1903 [2] 1418).
- \*4) Isoölsäure ( $\theta$ -Heptadeken- $\rho$ -Carbonsäure) (*C.* 1903 [1] 826).
- \*8) Lakton d.  $\gamma$ -Oxyheptadekan- $\alpha$ -Carbonsäure (*C.* 1903 [1] 826).
- 11)  $\alpha$ -Heptadeken- $\alpha$ -Carbonsäure. *Sm.* 59°. Na, Ca + H<sub>2</sub>O, Ba, Ag (*G.* 34 [2] 83 *C.* 1904 [2] 694).
- 12) Dihydrochaulmoograsäure. *Sm.* 71—72°; *Sd.* 248°<sub>30</sub> (*Soc.* 85, 857 *C.* 1904 [2] 348, 604).
- 13) Säure (aus Hefefett). *Sd.* 210—220°<sub>12</sub> (*H.* 38, 10 *C.* 1903 [1] 1429).
- 14) 1-Menthylester d. Caprylsäure. *Sd.* 175°<sub>15</sub> (*B.* 31, 364). — \*III, 334.
- $C_{18}H_{34}O_3$  \*9)  $\iota$ -Ketoheptadekan- $\alpha$ -Carbonsäure. *Sm.* 74—76°. Na, Ba (*C.* 1904 [1] 1331).
- 17)  $\gamma$ -Ketoheptadekan- $\alpha$ -Carbonsäure. *Sm.* 97°. Ca (*C.* 1903 [1] 826; *J. pr.* [2] 67, 418 *C.* 1903 [1] 1405).
- 18)  $\kappa$ -Ketoheptadekan- $\alpha$ -Carbonsäure. *Sm.* 65°. Ca (*C.* 1903 [1] 825; *J. pr.* [2] 67, 416 *C.* 1903 [1] 1404).
- 19) Lichesterylsäure. *Sm.* 83—84° (*Ar.* 241, 10 *C.* 1903 [1] 697).
- 20) Säure (aus Dioxystearinsäure vom *Sm.* 136,5°). *Fl.* (*J. pr.* [2] 67, 369 *C.* 1903 [1] 1404).
- $C_{18}H_{34}O_4$  21) Aethylester d.  $\iota$ -Keto- $\eta$ -Methyltetradekan- $\theta$ -Carbonsäure. *Sd.* 183 bis 184°<sub>11</sub> (*Bl.* [3] 31, 596 *C.* 1904 [2] 26).
- 15) isom. Ketooxystearinsäure. *Sm.* 63—64°. Ag (*B.* 36, 2658 *C.* 1903 [2] 826).
- 16) Dioxydihydrochaulmoograsäure. *Sm.* 102° (*Soc.* 85, 859 *C.* 1904 [2] 349, 604).
- $C_{18}H_{34}O_5$  4) Diisoamylester d. Homopilomalsäure. *Sd.* 192°<sub>35</sub> (*B.* 34, 732; 35, 200). — \*III, 637.
- $C_{18}H_{36}O$  4) Alkohol (aus Oelsäure). *Sd.* 207°<sub>18</sub> (*C. r.* 137, 328 *C.* 1903 [2] 710).
- $C_{18}H_{36}O_2$  \*1) Stearinsäure (*B.* 36, 1050 *C.* 1903 [1] 1148).
- \*6) Aethylester d. Palmitinsäure. *Sd.* 122° (*B.* 36, 4340 *C.* 1904 [1] 433).
- \*9) Oxyd (aus  $\alpha\gamma$ -Dioxy- $\beta\beta$ -Trimethylhexan). *Sd.* 244—246° u. Zers. (*M.* 24, 531 *C.* 1903 [2] 869).
- 10)  $\lambda$ -Isostearinsäure. *Sm.* 49,5—50,5°. Na, Ba, Ag (*Ar.* 241, 16 *C.* 1903 [1] 698).
- 11) Methylester d. Margarinsäure. *Sm.* 29° (*Soc.* 85, 837 *C.* 1904 [2] 509).
- $C_{18}H_{36}O_3$  \*1)  $\alpha$ -Oxystearinsäure. *Sm.* 84—85° (90—91°) (*C.* 1903 [1] 825; *J. pr.* [2] 67, 416 *C.* 1903 [1] 1404; *G.* 34 [2] 81 *C.* 1904 [2] 694).
- \*2)  $\iota$ -Oxyheptadekan- $\alpha$ -Carbonsäure. *Sm.* 83—85° (*C.* 1903 [1] 825; *J. pr.* [2] 67, 415 *C.* 1903 [1] 1404).
- 7)  $\alpha$ -Oxyheptadekan- $\alpha$ -Carbonsäure. *Sm.* 91—92° (*Soc.* 85, 830 *C.* 1904 [2] 509).
- $C_{18}H_{36}O_4$  \*3) Dioxystearinsäure (aus Oelsäure). *Sm.* 136,5° (*C.* 1903 [1] 319; *B.* 36, 1051 *C.* 1903 [1] 1148; *Ar.* 240, 660 *C.* 1903 [1] 406; *J. pr.* [2] 67, 290 *C.* 1903 [1] 1404; *J. pr.* [2] 67, 359 *C.* 1903 [1] 1404; *Ar.* 242, 22 *C.* 1904 [1] 734).
- \*4) Dioxystearinsäure (aus Elaïdinsäure). *Sm.* 99—100° (*C.* 1903 [1] 319; *J. pr.* [2] 67, 296 *C.* 1903 [1] 1404; *J. pr.* [2] 67, 362 *C.* 1903 [1] 1404).
- $C_{18}H_{36}O_5$  \*1) Sativinsäure. *Sm.* 173° (*B.* 36, 1051 *C.* 1903 [1] 1148).
- $C_{18}H_{36}O_6$  \*1) Linusinsäure (*B.* 36, 1051 *C.* 1903 [1] 1148).
- $C_{18}H_{38}O$  \*1)  $\alpha$ -Oxyoktadekan (*C.* 1904 [1] 822).
- $C_{18}H_{40}O_{10}$  C 51,9 — H 9,6 — O 38,4 — M. G. 416.
- 1) Verbindung (aus Camphersäure u. Isobuttersäure) (*R.* 21, 354 *C.* 1903 [1] 151).

- $C_{18}H_8O_7N_2$  C 59,3 — H 2,2 — O 30,8 — N 7,7 — M. G. 364.
- 1) 6, P-Dinitro-11-Oxy-5, 12-Diketo-5, 12-Dihydronaphtacen. *Sm.* 260° (*B.* 36, 2327 *C.* 1903 [2] 442).

- $C_{18}H_8O_8N_2$  C 56,8 — H 2,1 — O 33,7 — N 7,4 — M. G. 380.  
 1) *p*-Dinitro-6,11-Dioxy-5,12-Diketo-5,12-Dihydroacenaphten (B. 36, 2329 C. 1903 [2] 442).
- $C_{18}H_9O_5N$  C 67,7 — H 2,8 — O 25,1 — N 4,4 — M. G. 319.  
 1) 6-Nitro-11-Oxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 274° (B. 36, 2326 C. 1903 [2] 442).
- $C_{18}H_{10}OS$  1) Verbindung (aus Phenanthrenchinon u. Thiophen) (B. 37, 3352 C. 1904 [2] 1058).
- $C_{18}H_{10}O_4Cl_4$  1) Diacetat d.  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthin. Sm. 234° (A. 325, 78 C. 1903 [1] 463).
- $C_{18}H_{10}O_4Cl_6$  \*1) Diacetat d.  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 182° (A. 325, 81 C. 1903 [1] 464).  
 2) 1,3-Dichlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (Hexachlor- $\gamma$ -Truxillsäure). Sm. 316° (B. 37, 220 C. 1904 [1] 588).  
 3) isom. 1,3-Dichlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (Hexachlor- $\gamma$ -Truxillsäure). Sm. 235° (B. 37, 224 C. 1904 [1] 588).
- $C_{18}H_{10}O_4Cl_8$  \*1) Diacetat d.  $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 176—177° (A. 325, 87 C. 1903 [1] 464).
- $C_{18}H_{10}O_6N_2$  \*3) Dioxycarbindigo. Sm. noch nicht bei 300° (B. 37, 1977 C. 1904 [2] 236).  
 4) isom. Indigocarbonsäure (D.R.P. 73 687). — \*II, 948.
- $C_{18}H_{10}O_6Cl_4$  1) Diacetat d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 165° (A. 325, 89 C. 1903 [1] 464).
- $C_{18}H_{10}O_6Br_4$  1) Diacetat d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 191° (A. 325, 90 C. 1903 [1] 465).
- $C_{18}H_{10}O_6S$  2) 11-Oxy-5,12-Naphtacenchinon-*p*-Sulfonsäure (B. 36, 720 C. 1903 [1] 773).
- $C_{18}H_{10}O_7S$  1) 6,11-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen-*p*-Sulfonsäure (D.R.P. 138325 C. 1903 [1] 371; B. 36, 724 C. 1903 [1] 774).
- $C_{18}H_{10}N_4Cl_8$  1) 2,10-Dichlorhomofluorindin (B. 36, 4031 C. 1904 [1] 294).
- $C_{18}H_{11}O_2N$  \*3) Chinophtalon. Sm. 238—240°. Na, K (B. 37, 3006 C. 1904 [2] 1408).  
 \*10) Isochinophtalon (B. 37, 3009 C. 1904 [2] 1408; B. 37, 3011 C. 1904 [2] 1409).
- $C_{18}H_{11}O_3N$  5) 6-Amido-11-Oxy-5,12-Diketo-5,12-Dihydronaphtacen (B. 36, 2327 C. 1903 [2] 442).
- $C_{18}H_{11}O_4N$  C 70,8 — H 3,6 — O 21,0 — N 4,6 — M. G. 305.  
 1) 6-Amido-11,*p*-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen (B. 36, 2329 C. 1903 [2] 442).
- $C_{18}H_{11}O_4N_3$  3) 6,6'-Diazoamidocumarin. Sm. 230—234° (Nov. 85, 1234 C. 1904 [2] 1124).
- $C_{18}H_{11}O_4Cl_5$  1) 1-Chlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (Pentachlor- $\alpha$ -Truxillsäure). Sm. 274°.  $Ag_2$  (B. 37, 222 C. 1904 [1] 588).
- $C_{18}H_{11}O_5N$  2) *p*-Nitro-2,5-Dibenzoylfuran. Sm. 130—131° (Am. 25, 459). — \*III, 523.
- $C_{18}H_{11}O_5N_5$  \*1) 2,4-Dinitrophenyläther d. 2',4'-Dinitro-4-Oxydiphenylamin. Sm. 225° (233°) (B. 37, 1518 C. 1904 [1] 1597; B. 37, 1732 C. 1904 [1] 1521).
- $C_{18}H_{11}N_4Cl$  2) 2-Chlorhomofluorindin. HCl (B. 36, 4030 C. 1904 [1] 294).
- $C_{18}H_{12}ON_2$  \*12) 1-Benzoyl- $\beta$ -Naphthimidazol. Sm. 126° (B. 37, 3116 C. 1904 [2] 1316).  
 \*14)  $\beta$ -Chinophtalin (B. 37, 3021 C. 1904 [2] 1410).  
 16) 1-Keto-2-Phenylimido-1,2-Dihydro- $\beta$ -Naphthindol ( $\beta$ -Naphtisatin- $\alpha$ -Anilid) (D.R.P. 153418 C. 1904 [2] 679).
- $C_{18}H_{12}OS_3$  1) 3,5-Dimerkapto-4-Thiocarbonyl-1-Keto-2,6-Diphenyl-1,4-Dihydrobenzol. Sm. 165°. +  $CHCl_3$ , +  $(C_2H_5)_2O$ , +  $C_6H_6$ ,  $(NH_4)_2Na_2$  +  $2C_2H_5O$ ,  $K_2$  +  $12H_2O$ ,  $Ba$  +  $10H_2O$  (B. 37, 1602 C. 1904 [1] 1444).
- $C_{18}H_{12}O_2S_2$  1) Diphenyläther d. 2,5-Dimerkapto-1,4-Benzochinon. Sm. 257° (A. 336, 126 C. 1904 [2] 1298).  
 2) Diphenyläther d. 2,6-Dimerkapto-1,4-Benzochinon. Sm. 203—204° (A. 336, 130 C. 1904 [2] 1298).

- $C_{18}H_{12}O_4N_2$  11) *p*-Diamido-6,11-Dioxy-5,12-Diketo-5,12-Dihydroacenaphten (*B* 36, 2330 *C*. 1903 [2] 442).  
 12) Verbindung (aus Chinolylacetophenon-2-Carbonsäure). Sm. 205° u. Zers. (*B* 37, 3013 *C*. 1904 [2] 1409).
- $C_{18}H_{12}O_4Cl_4$  1) Diacetat d.  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 246° (*A*. 325, 50 *C*. 1903 [1] 462).
- $C_{18}H_{12}O_4Cl_6$  1) Diacetat d.  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 206°? (*A*. 325, 65 *C*. 1903 [1] 463).
- $C_{18}H_{12}O_4Br_4$  1) Diacetat d.  $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthen. Sm. 241° (*A*. 325, 31 *C*. 1903 [1] 460).
- $C_{18}H_{12}O_4Br_6$  1) Diacetat d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 216° u. Zers. (*A*. 325, 43 *C*. 1903 [1] 461).
- $C_{18}H_{12}O_6N_2$  3) 3,5-Dinitro-2-Oxy-1,4-Diphenylbenzol. Sm. 193—194°. *K* (*B* 36, 1410 *C*. 1903 [1] 1358).
- $C_{18}H_{12}O_6Br_6$  1) 4,4'-Diacetat d. 2,3,5,2',3',5'-Hexabrom- $\alpha$ ,4,4'-Trioxydiphenylmethan- $\alpha$ -Methyläther. Sm. 197° (*A*. 330, 78 *C*. 1904 [1] 1148).
- $C_{18}H_{12}O_6N_6$  3) 4-[2,4,6-Trinitrophenylamido]azobenzol. Sm. 176—177° (*J. pr.* [2] 69, 43 *C*. 1904 [1] 508).
- $C_{18}H_{12}N_3Cl_3$  1) 2,4,6-Trichlor-1-Diphenylamidodiazobenzol. Sm. 38—39° (*C. r.* 139, 570 *C*. 1904 [2] 1497).
- $C_{18}H_{12}N_3Br_3$  1) 2,4,6-Tribrom-1-Diphenylamidodiazobenzol. Sm. 48° (*C. r.* 139, 570 *C*. 1904 [2] 1497).
- $C_{18}H_{12}N_6S_2$  1) Disulfid d. 3-Merkapto-5-Phenyl-1,2,4-Triazin. Sm. 183° (*B* 36, 4129 *C*. 1904 [1] 295).
- $C_{18}H_{12}Cl_2J_4$  1) Di[3-Jodphenyl]-1,3-Phenylendijodoniumchlorid. 2 +  $PtCl_4$  (*B* 37, 1310 *C*. 1904 [1] 1340).
- $C_{18}H_{12}Br_2J_4$  1) Di[3-Jodphenyl]-1,3-Phenylendijodoniumbromid. Sm. 146° (*B* 37, 1310 *C*. 1904 [1] 1340).
- $C_{18}H_{18}ON_8$  13) Phenylhydrazon d. 2-Naphtisatin. Sm. 220° (*B* 36, 1737 *C*. 1903 [2] 119).
- $C_{18}H_{18}OBr$  2) 5-Brom-2-Oxy-1,4-Diphenylbenzol. Sm. 86° (*B* 36, 1409 *C*. 1903 [1] 1358).
- $C_{18}H_{18}O_3N$  \*5) 2,6-Diphenylpyridin-4-Carbonsäure. Sm. 278—279°. *Ag* (*Bl.* [3] 29, 407 *C*. 1903 [1] 1362).  
 15) Methylenäther d. 2-[3,4-Dioxybenzyliden]amidonaphtalin. Sm. 115°. +  $C_6H_6O$  (*B* 37, 1703 *C*. 1904 [1] 1497).
- $C_{18}H_{18}O_3Br_3$  1) Dimethyläther d. *p*-Brom-3,4-Dioxy-*p*-Aethenylphenanthren. Sm. 158—159° (*B* 35, 4392 *C*. 1903 [1] 339).
- $C_{18}H_{18}O_8N$  \*6) 2<sup>2</sup>-Amid d. 2-Phenylnaphtalin-1,2<sup>2</sup>-Dicarbonsäure. Sm. 220° (*A*. 335, 122 *C*. 1904 [2] 1133).  
 \*7) 1-Amid d. 2-Phenylnaphtalin-1,2<sup>2</sup>-Dicarbonsäure. Sm. 275° (*A*. 335, 122 *C*. 1904 [2] 1133).
- 10) Chinolylacetophenon-2-Carbonsäure. Sm. 155° u. Zers. (*B* 37, 3012 *C*. 1904 [2] 1409; *B* 37, 3022 *C*. 1904 [2] 1410).
- $C_{18}H_{18}O_4N$  9) Methylester d.  $\alpha$ -Cyan- $\beta$ -Benzoxyl- $\beta$ -Phenylakrylsäure. Sm. 83° (*C. r.* 136, 691 *C*. 1903 [1] 920; *Bl.* [3] 31, 335 *C*. 1904 [1] 1135).  
 $C$  59,5 —  $H$  3,6 —  $O$  17,5 —  $N$  19,3 — *M. G.* 363.
- $C_{18}H_{18}O_4N_5$  1) 4-[2,4-Dinitrophenylamido]azobenzol. Sm. 175,5—176° (*J. pr.* [2] 69, 43 *C*. 1904 [1] 508).
- $C_{18}H_{18}O_4Br$  2) Diacetat d. 2-Brom-9,10-Dioxyphenanthren. Sm. 178—179° (*B* 37, 3561 *C*. 1904 [2] 1401).
- $C_{18}H_{18}O_6N$  5) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]butan- $\beta$ -Keto-carbonsäure. Sm. 118° (*A*. 333, 237 *C*. 1904 [2] 1390).  
 6) Diacetat d. 2-Nitro-9,10-Dioxyphenanthren. Sm. 258° (*B* 36, 3732 *C*. 1904 [1] 35).  
 7) Diacetat d. 4-Nitro-9,10-Dioxyphenanthren. Sm. 222—223° u. Zers. (*B* 36, 3736 *C*. 1904 [1] 36).
- $C_{18}H_{18}N_3Cl_2$  1) 2,4-Dichlor-1-Diphenylamidodiazobenzol. Sm. 35—40° (*C. r.* 139, 570 *C*. 1904 [2] 1497).
- $C_{18}H_{18}N_3Br_2$  1) 2,4-Dibrom-1-Diphenylamidodiazobenzol. Sm. 80° (*C. r.* 139, 570 *C*. 1904 [2] 1497).
- $C_{18}H_{18}N_3J_2$  1) 2,4-Dijod-1-Diphenylamidodiazobenzol. Sm. 70° (*C. r.* 139, 571 *C*. 1904 [2] 1497).

- $C_{18}H_{14}ON_4$  \*2) 4-Oxy-1,3-Di[Phenylazo]benzol. Sm. 123° (*C. r.* 138, 1278 *C.* 1904 [2] 97).
- $C_{18}H_{14}O_2N_2$  27) 2-Oxy-1-[2-Acetylphenyl]azonaphtalin. Sm. 198,5—199° (*B.* 36, 1621 *C.* 1903 [2] 36).
- 28) 2,2'-Dimethylindigo (D. R. P. 58276, 63310). — \*II, 960.
- $C_{18}H_{14}O_2N_4$  19) 2-Nitro-1-Diphenylamidodiazobenzol. Fl. (*C. r.* 139, 569 *C.* 1904 [2] 1497).
- 20) 3-Nitro-1-Diphenylamidodiazobenzol. Fl. (*C. r.* 139, 569 *C.* 1904 [2] 1497).
- 21) 4-Nitro-1-Diphenylamidodiazobenzol. Sm. 63° (*C. r.* 139, 569 *C.* 1904 [2] 1497).
- 22)  $\alpha\beta$ -Di[4-Keto-3,4-Dihydro-1,3-Benziazin-2-]äthan +  $H_2O$ . Sm. oberh. 310° (wasserfrei). (2 HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 69, 23 *C.* 1904 [1] 640).
- $C_{18}H_{14}O_2Br_4$  1) Bromderivat d. 3,4-Dioxy-P-Aethenylphenanthrendimethyläther. Sm. 145—147° u. Zers. (*B.* 35, 4391 *C.* 1903 [1] 339).
- $C_{18}H_{14}O_2J_4$  1) Di[3-Jodphenyl]-1,3-Phenylendijodoniumhydroxyd. Salze siehe (*B.* 37, 1310 *C.* 1904 [1] 1340).
- $C_{18}H_{14}O_2S_2$  1) 2,5-Diphenyläther d. 2,5-Dimerkapto-1,4-Dioxybenzol. Sm. 103° (*A.* 336, 134 *C.* 1904 [2] 1298).
- 2) 2,6-Diphenyläther d. 2,6-Dimerkapto-1,4-Dioxybenzol (*A.* 336, 136 *C.* 1904 [2] 1299).
- 3) Disulfid d.  $\beta$ -Phenylakrylthiolsäure (Zimmtsäuredisulfid). Sm. 139° (*B.* 36, 2272 *C.* 1903 [2] 563).
- $C_{18}H_{14}O_8N_2$  17) Oxim d. Chinolylacetophenon-2-Carbonsäure. Sm. 145° u. Zers. (*B.* 37, 3012 *C.* 1904 [2] 1409).
- $C_{18}H_{14}O_4N_2$  \*1) Dibenzamidodioxytetrol. Sm. 137,5° (*J. pr.* [2] 70, 239 *C.* 1904 [2] 1462).
- 14)  $\alpha\gamma$ -Dioximido- $\beta$ -Phtalyl- $\alpha$ -Phenylbutan. Sm. 63° (*B.* 37, 582 *C.* 1904 [1] 940).
- 15)  $\alpha\beta$ -Di[2-Methylenamidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (*A.* 332, 276 *C.* 1904 [2] 701).
- 16) 1-Phenylazo-3,4-Dioxynaphtalin-2-Methylcarbonsäure. Sm. 212° u. Zers. (E. Hoyer, Dissert., Berlin 1901).
- $C_{18}H_{14}O_4N_4$  \*3) 4-Amido-4'-[2,4-Dinitrophenyl]amidobiphenyl. Sm. 244—245° (*J. pr.* [2] 68, 262 *C.* 1903 [2] 1064).
- $C_{18}H_{14}O_4Cl_4$  2) Diacetat d.  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 159° (*A.* 325, 50 *C.* 1903 [1] 462).
- $C_{18}H_{14}O_4Br_2$  \*2) 1,3-Di[4-Bromphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (Dibrom- $\alpha$ -Truxillsäure). Sm. 296°. Ag<sub>2</sub> (*B.* 37, 219, 224 Anm. *C.* 1904 [1] 588).
- 3) isom. 1,3-Di[4-Bromphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (Dibrom- $\gamma$ -Truxillsäure). Sm. 280° (*B.* 37, 223 *C.* 1904 [1] 588).
- $C_{18}H_{14}O_6Cl_4$  1)  $\alpha\beta$ -Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 220° (*A.* 325, 60 *C.* 1903 [1] 462).
- 2)  $\alpha\beta$ -Diacetat d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 202° (*A.* 325, 62 *C.* 1903 [1] 462).
- $C_{18}H_{14}O_6Br_4$  1)  $\alpha\beta$ -Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 218° (*A.* 325, 38 *C.* 1903 [1] 461).
- 2)  $\alpha\beta$ -Diacetat d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan? Sm. 217° (*A.* 325, 40 *C.* 1903 [1] 461).
- $C_{18}H_{14}O_{14}N_4$  C 42,4 — H 2,7 — O 43,9 — N 11,0 — M. G. 510.
- 1) Di[ $\beta$ -Dinitro-2-Methoxyphenylester] d. Bernsteinsäure (*B.* 35, 4083 *C.* 1903 [1] 74).
- $C_{18}H_{14}NJ$  \*1) Jodmethylyat d.  $\alpha$ -Chrysidin. Sm. 262—263° (*B.* 37, 2925 *C.* 1904 [2] 1412).
- \*2) Jodmethylyat d.  $\beta$ -Chrysidin. Sm. 264° (*B.* 37, 2927 *C.* 1904 [2] 1412).
- $C_{18}H_{14}N_2J_2$  1) 4-Phenylazodiphenyljodoniumjodid. Sm. 135° (*B.* 37, 1314 *C.* 1904 [1] 1341).
- $C_{18}H_{14}N_8Cl$  2) 2-Chlor-1-Diphenylamidodiazobenzol. Fl. (*C. r.* 139, 569 *C.* 1904 [2] 1497).
- 3) 3-Chlor-1-Diphenylamidodiazobenzol. Fl. (*C. r.* 139, 569 *C.* 1904 [2] 1497).
- 4) 4-Chlor-1-Diphenylamidodiazobenzol. Sm. 20° (*C. r.* 139, 569 *C.* 1904 [2] 1497).

- $C_{18}H_{14}N_3Br$  2) 2-Brom-1-Diphenylamidodiazobenzol. Fl. (C. r. 139, 570 C. 1904 [2] 1497).  
 3) 3-Brom-1-Diphenylamidodiazobenzol. Fl. (C. r. 139, 570 C. 1904 [2] 1497).  
 4) 4-Brom-1-Diphenylamidodiazobenzol. Fl. (C. r. 139, 570 C. 1904 [2] 1497).
- $C_{18}H_{14}N_3J$  1) 4-Jod-1-Diphenylamidodiazobenzol. Fl. (C. r. 139, 571 C. 1904 [2] 1497).
- $C_{18}H_{16}ON$  19) 1-Phenyl-1,3-Dihydro-4,2- $\beta$ -Naphthisoazin. Sm. 214° (G. 33 [1] 29 C. 1903 [1] 926).  
 20) 10-Methyl-1,2-Naphtakridol. Sm. 206—207° (B. 37, 2928 C. 1904 [2] 1412).
- $C_{18}H_{16}OP$  2) Triphenylphosphinoxid. Sm. 156° (C. r. 139, 675 C. 1904 [2] 1638).
- $C_{18}H_{15}O_2N$  32) Imid d. Buttersäure. Sm. 107° (C. r. 137, 128 C. 1903 [2] 552).
- $C_{18}H_{15}O_2N_5$  2) 1-[Methyl- $\alpha$ -Cyanäthylamido]-1-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amido-benzol. Sm. 142° (B. 36, 759 C. 1903 [1] 962).
- $C_{18}H_{16}O_2Br$  3) Methylester d. 2-Brom- $\alpha$ - $\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 81—82° (J. pr. [2] 68, 533 C. 1904 [1] 452).
- $C_{18}H_{16}O_3N$  16) Methylenäther d. Methyl-4-[3,4-Dioxybenzyliden]amidophenylketon. Sm. 158° (B. 37, 1701 C. 1904 [1] 1497).  
 17) 4-Acetylamido-1-Benzoyl-2-Methylbenzofuran. Sm. 178—179° (B. 36, 1260 C. 1903 [1] 1183).  
 18) 3-Methyl-5-Phenyl-4-Benzylisoxazol-4<sup>2</sup>-Carbonsäure. Sm. 189 bis 190° (B. 37, 588 C. 1904 [1] 940).  
 19) Verbindung  $+ \frac{1}{2}H_2O$  (aus Thallin u. Phtalsäureanhydrid). Sm. 239° (B. 37, 1963 C. 1904 [2] 44).
- $C_{18}H_{16}O_3N_8$  7) 4-[3-Nitro-4-Acetylamidobenzyl]isochinolin  $+ 3H_2O$ . Sm. 144 bis 145° (wasserfrei) (A. 326, 281 C. 1903 [1] 928).  
 8) Äthylester d. 4-Phenylazo-5-Phenylisoxazol-3-Carbonsäure. Sm. 99—100° (B. 37, 2205 C. 1904 [2] 323).  
 C 61,9 — H 4,3 — O 13,8 — N 20,0 — M. G. 349.
- $C_{18}H_{16}O_3N_5$  1) 1-Phenylamidoformyl-4-Phenylamidoformylamido-2-Keto-1,2-Dihydro-1,3-Diazin. Sm. 260° (Am. 29, 501 C. 1903 [1] 1311).
- $C_{18}H_{16}O_3Br$  3) Methyläther d. Bromthebenol. Sm. 148—149° (B. 37, 2791 C. 1904 [2] 716).
- $C_{18}H_{16}O_3B$  \*1) Triphenylester d. Borsäure. Sm. 50° (B. 36, 2222 C. 1903 [2] 420).
- $C_{18}H_{16}O_4N$  \*5) Benzylimid d. i-Benzoyläpfelsäure. Sm. 100—101° (J. pr. [2] 70, 9 C. 1904 [2] 774).  
 \*6) Benzylimid d. d-Benzoyläpfelsäure. Sm. 126—127° (J. pr. [2] 70, 11 C. 1904 [2] 774).  
 10) Methylester d.  $\alpha$ -[4-Nitrophenyl]- $\delta$ -Phenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 130—131° (A. 336, 216 C. 1904 [2] 1732).  
 11) Benzylimid d. 1-Benzoyläpfelsäure. Sm. 126—127° (J. pr. [2] 70, 12 C. 1904 [2] 774).
- $C_{18}H_{16}O_4Cl$  1) Diacetat d.  $\alpha$ -Chlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 125—126° (A. 335, 183 C. 1904 [2] 1130).
- $C_{18}H_{16}O_4Br$  4) Diacetat d.  $\alpha$ -Brom- $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 126—127° (A. 335, 182 C. 1904 [2] 1130).
- $C_{18}H_{16}O_5N$  2) Äthylester d. 3-Nitrobenzylidenbenzoylessigsäure. Sm. 107—108° (Soc. 83, 722 C. 1903 [2] 54).  
 C 54,4 — H 3,8 — O 24,2 — N 17,6 — M. G. 397.
- $C_{18}H_{16}O_5N_5$  1) 4,6-Dinitro-5-Methylnitramido-2-Methylphenyl-2-Naphtylamin. Sm. 131° (J. pr. [2] 67, 526 C. 1903 [2] 239).
- $C_{18}H_{16}O_7N$  2)  $\alpha$ -Phenyl- $\beta$ -[2-Nitro-3-Acetoxy-4-Methoxyphenyl]akrylsäure. Sm. 201° (B. 35, 4412 C. 1903 [1] 343).  
 3)  $\beta$ -[2-Carboxybenzoyl]amido- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 160—165° u. Zers. (C. 1903 [2] 33).  
 C 53,9 — H 3,7 — O 31,9 — N 10,5 — M. G. 401.
- $C_{18}H_{16}O_8N_3$  1) Diphenyläther d. Nitrodioxydichinolnitrosäure. Na<sub>2</sub> (Am. 29, 118 C. 1903 [1] 709).
- $C_{18}H_{16}ON_2$  23) 4-Phenylamido-4'-Oxydiphenylamin (D. R. P. 150 553 C. 1904 [1] 1467).  
 24) 4-[4-Acetylamidobenzyl]isochinolin. Sm. 181—182° (A. 326, 279 C. 1903 [1] 928).

- $C_{18}H_{16}OS$  1) 5-Thiocarbonyl-2-Keto-1,3-Diphenylhexahydrobenzol. Sm. 136,5° (B. 37, 1609 C. 1904 [1] 1445).
- $C_{18}H_{16}OSi$  \*1) Siliciumtriphenyloxyhydrat. Sm. 155° (B. 37, 1140 C. 1904 [1] 1257).
- $C_{18}H_{16}O_2N_2$  28)  $\alpha\beta$ -Di[4-Acetylamidophenyl]äthin. Sm. 270° (A. 325, 73 C. 1903 [1] 463).
- 29) 6-Methyl-1,3-Diphenyl-1,4-Dihydro-1,2-Diazin-5-Carbonsäure. Sm. 185—186° (A. 331, 310 C. 1904 [2] 45).
- 30) Phenylimid d.  $\alpha$ -Phenylamido- $\alpha$ -Buten- $\alpha\beta$ -Dicarbonsäure. Sm. 113 bis 114° (B. 37, 2383 C. 1904 [2] 306).
- $C_{18}H_{16}O_2N_4$  8) Aethylester d. 4-Phenylazo-5-Phenylpyrazol-3-Carbonsäure. Sm. 153° (B. 37, 2208 C. 1904 [2] 323).
- $C_{18}H_{16}O_2N_6$  C 62,1 — H 4,6 — O 9,2 — N 24,1 — M. G. 348.
- 1) 3,6-Di[3-Acetylamidophenyl]-1,2,4,5-Tetrazin. Sm. 295° (B. 35, 3937 C. 1903 [1] 38).
- $C_{18}H_{16}O_2Br_2$  \*2) Methyl ester d.  $\gamma\delta$ -Dibrom- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 118° (J. pr. [2] 68, 527 C. 1904 [1] 452).
- 3) Methyl ester d. isom.  $\beta$ -Dibrom- $\alpha\beta$ -Diphenyl- $\alpha$ - oder - $\beta$ -Buten- $\alpha$ -Carbonsäure. Sm. 133—134° (J. pr. [2] 68, 526 C. 1904 [1] 451).
- $C_{18}H_{16}O_2S$  1)  $\delta$ -Merkapto- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 164° (M. 23, 970 C. 1903 [1] 284).
- $C_{18}H_{16}O_2S_2$  \*1) Diphenyläther d. 2,5-Dimerkapto-1,4-Diketohexahydrobenzol (Thiophenochinon) (A. 336, 117 C. 1904 [2] 1298).
- $C_{18}H_{16}O_3N_2$  14) 4-Acetylamido-1-[ $\alpha$ -Oximidobenzyl]-2-Methylbenzofuran. Sm. 192° (B. 36, 1261 C. 1903 [1] 1183).
- 15) 2,4,6-Triketo-5,5-Dibenzylhexahydro-1,3-Diazin. Sm. 222° (D. R. P. 146496 C. 1903 [2] 1484; A. 335, 347 C. 1904 [2] 1381).
- $C_{18}H_{16}O_3Cl_2$  1)  $\delta$ -Acetat d.  $\gamma\gamma$ -Dichlor- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 106° (B. 36, 2396 C. 1903 [2] 498).
- $C_{18}H_{16}O_3Br_2$  3) Aethylester d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 110° (G. 33 [2] 147 C. 1903 [2] 1270).
- 4)  $\delta$ -Acetat d.  $\gamma\gamma$ -Dibrom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 124° (B. 36, 2398 C. 1903 [2] 498).
- 5)  $\delta$ -Acetat d. isom.  $\gamma\gamma$ -Dibrom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 103° (B. 36, 2399 C. 1903 [2] 498).
- $C_{18}H_{16}O_4N_2$  \*7) Aethylester d. Phenylazobenzoylbrenztraubensäure. Sm. 115 bis 116° (B. 37, 2204 C. 1904 [2] 323).
- 14) Diacetat d. Di[2-Oxybenzyliden]hydrazin. Sm. 190—191° (B. 37, 3185 C. 1904 [2] 991).
- $C_{18}H_{16}O_4Cl_2$  2) Diacetat d.  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 220° u. Zers. (A. 335, 179 C. 1904 [2] 1130).
- 3) Diacetat d. isom.  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 132° (A. 335, 181 C. 1904 [2] 1130).
- $C_{18}H_{16}O_4Br_2$  4) Diacetat d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 215° u. Zers. (A. 335, 176, 178 C. 1904 [2] 1129).
- 5) Diacetat d. isom.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 169 bis 170° (A. 335, 176, 179 C. 1904 [2] 1130).
- $C_{18}H_{16}O_5N_4$  3) 1-Dimethylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 105—106° (Soc. 83, 1338 C. 1904 [1] 99).
- 4) 1-Aethylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 153,5—154° (Soc. 83, 1337 C. 1904 [1] 99).
- 5) 2-Aethylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 106° (Soc. 83, 1339 C. 1904 [1] 99).
- $C_{18}H_{16}O_5Br_4$  1) 9-Methyläther d. Tetrabrom-1,3,6,8-Tetraketo-2,4,5,7-Tetramethyloktahydroxanthren. Sm. 155—160° u. Zers. (M. 25, 680 C. 1904 [2] 1145).
- $C_{18}H_{16}O_5N_2$  5) Biphenyl-3,3'-Dicarbonsäure-4,4'-Di[Amidoessigsäure]. Sm. oberh. 300° (C. 1903 [1] 34).
- $C_{18}H_{16}ClJ$  1) 4-Aethylphenyl-1-Naphtyljodoniumchlorid. Sm. 168°. 2 +  $HgCl_2$ , 2 +  $PtCl_4$  (A. 327, 299 C. 1903 [2] 352).
- $C_{18}H_{16}BrJ$  1) 4-Aethylphenyl-1-Naphtyljodoniumbromid. Sm. 156° (A. 327, 299 C. 1903 [2] 352).
- $C_{18}H_{17}ON$  17)  $\epsilon$ -Oximido- $\alpha$ -Phenyl- $\epsilon$ -[4-Methylphenyl]- $\alpha\gamma$ -Pentadien. Sm. 170° (B. 36, 847 C. 1903 [1] 975).

- $C_{18}H_{17}ON$  18)  $\epsilon$ -Oximido- $\epsilon$ -Phenyl- $\alpha$ -[4-Methylphenyl]- $\alpha\gamma$ -Pentadien. Sm. 128 bis 129° (*B.* 36, 851 *C.* 1903 [1] 975).  
 19) 4-Methylamido-[2-Oxy-1-Naphtyl]methan. Sm. 142°. *HCl* (*M.* 23, 998 *C.* 1903 [1] 290).  
 20) 4-Methylamidophenyl-[4-Oxy-1-Naphtyl]methan. Sm. 141—142°. *HCl*,  $H_2SO_4$  (*M.* 23, 996 *C.* 1903 [1] 290).  
 21) 10-Acetylamido-9-Aethylanthracen. Sm. 259—260° (*A.* 330, 174 *C.* 1904 [1] 891).  
 22) 7-Oxy-2-Propyl-4-Phenylchinolin. Sm. 221° (*B.* 36, 4019 *C.* 1904 [1] 293).  
 23) Aethyläther d. 7-Oxy-2-Methyl-4-Phenylchinolin. Sm. 91° (*B.* 36, 2455 *C.* 1903 [2] 670).
- $C_{18}H_{17}ON_3$  12) 4-[4-Amidophenyl]amido-1-[4-Oxyphenyl]amidobenzol. Sm. 185° (*D.R.P.* 153994 *C.* 1904 [2] 966).  
 13) 3-Benzoylimido-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol (Benzoyliminopyrin). Sm. 176° (*B.* 36, 3285 *C.* 1903 [2] 1190).  
 14) Monoacetylderivat d. 2-[ $\beta$ -3-Amidophenyläthenyl]-5- oder -6-Methylbenzimidazol (*C.* 1904 [1] 103).  
 15) Verbindung (aus Benzaldehyd u.  $\alpha$ -Cyanpropionsäureäthylester). Sm. 198° u. Zers. (*C.* 1903 [2] 713).  
 16) isom. Verbindung (aus Benzaldehyd u.  $\alpha$ -Cyanpropionsäureäthylester). Sm. 210° u. Zers. (*C.* 1903 [2] 713).
- $C_{18}H_{17}OJ$  1) 4-Aethylphenyl-1-Naphtyljodoniumhydrat. Salze siehe (*A.* 327, 299 *C.* 1903 [2] 352).
- $C_{18}H_{17}O_2N$  11) 4-Methylamidophenyl-[2,3-Dioxy-1-Naphtyl]methan. Sm. 185 bis 186°.  $H_2SO_4$  (*M.* 23, 1001 *C.* 1903 [1] 290).  
 12) 4-Methylamidophenyl-[2,7-Dioxy-1-Naphtyl]methan. Sm. 179—180° (*M.* 23, 1000 *C.* 1903 [1] 290).  
 13) Äthylester d.  $\alpha$ -Cyan- $\alpha\beta$ -Diphenylpropionsäure. *Sd.* 231—233°<sub>32</sub> (*Am.* 32, 130 *C.* 1904 [2] 954).  
 14) Acetat d.  $\gamma$ -Oximido- $\alpha\beta$ -Diphenyl- $\alpha$ -Buten. Sm. 92° (*M.* 19, 410; 20, 739; 22, 667). — \*III, 185.  
 15) Acetat d. syn- $\alpha$ -Oximido- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten. Sm. 74° (*M.* 25, 436 *C.* 1904 [2] 336).  
 16) Nitril d. 1-Oxymethylbenzoleugenoläther-4-Carbonsäure. Sm. 63 bis 64° (*D.R.P.* 82924). — \*II, 927.  
 17) Nitril d. 1-Oxymethylbenzolisoeugenoläther-4-Carbonsäure. Sm. 97—98° (*D.R.P.* 82924). — \*II, 927.
- $C_{18}H_{17}O_3N_3$  11) Phenylhydrazon d. 1-Keto-4-Oxy-3-Propionyl-1,2-Dihydroisochinolin. Sm. 212—213° (*B.* 37, 2486 *C.* 1904 [2] 420).  
 12) Acetat d. 5-Oxy-1-Phenyl-3-[ $\beta$ -Phenyläthyl]-1,2,4-Triazol. Sm. 109° (*B.* 36, 1102 *C.* 1903 [1] 1140).  
 13) Verbindung (aus Benzylidenbenzoylacetone u. Semicarbazid). Zers. bei 230° (*Soc.* 85, 467 *C.* 1904 [1] 1030, 1438).
- $C_{18}H_{17}O_3N$  6) Dimethyläther d. 6,7-Dioxy-1-Keto-2-Benzyl-1,2-Dihydroisochinolin. Sm. 167°. Pikrat (*B.* 37, 530 *C.* 1904 [1] 818; *B.* 37, 3814 *C.* 1904 [2] 1575).  
 7)  $\alpha$ -Cinnamoylamido- $\beta$ -Phenylpropionsäure. Sm. 198—199° (*B.* 37, 3069 *C.* 1904 [2] 1208).  
 8) Äthylester d.  $\alpha$ -Cyan- $\beta$ -[2-Aethoxyl-1-Naphtyl]akrylsäure. Sm. 71° (*Bl.* [3] 29, 880 *C.* 1903 [2] 885).
- $C_{18}H_{17}O_3N_5$  2) Amid d. 1-[Methyl- $\alpha$ -Carboxyäthylamido]-4-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amidobenzol. Sm. 205—210° (*B.* 36, 762 *C.* 1903 [1] 963).  
 3) Azid d.  $\alpha$ -Benzoylamidoacetylamido- $\beta$ -Phenylpropionsäure. Zers. bei 70° (*J. pr.* [2] 70, 229 *C.* 1904 [2] 1462).
- $C_{18}H_{17}O_3Cl$  1) Äthylester d.  $\beta$ -Keto- $\gamma$ -[4-Chlorphenyl]- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure. Sm. 166—168° (*J. pr.* [2] 67, 392 *C.* 1903 [1] 1357).
- $C_{18}H_{17}O_4N$  8) Dimethyläther d. Papaverolin. (2 *HCl*, *PtCl*<sub>4</sub>), Pikrat (*C.* 1903 [1] 844).  
 9) Trimethyläther d. 7,8-Dioxy-2-Keto-3-[4-Oxyphenyl]-1,2-Dihydrochinolin. Sm. 282° (*B.* 35, 4405 *C.* 1903 [1] 342).
- $C_{18}H_{17}O_5N$  9) 2-Äthylester d. Benzoyl-2-Carboxyphenylamidoessigsäure. Sm. 141—143° (*D.R.P.* 138207 *C.* 1903 [1] 305).  
 10)  $\beta$ -Benzylamid d. d- $\alpha$ -Benzoxyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 125° (*B.* 37, 2125 *C.* 1904 [2] 439).

- $C_{18}H_{17}O_5N$  11)  $\beta$ -Benzylamid d. i- $\alpha$ -Benzoxyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 116° (B. 37, 2126 C. 1904 [2] 439).
- $C_{18}H_{17}O_5N_3$  C 60,8 — H 4,8 — O 22,5 — N 11,8 — M. G. 355.  
 1) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxy-3-Methylbenzyliden]-hydrazin. Sm. 199–200° (B. 37, 3922 C. 1904 [2] 1594).  
 2) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-6-Oxy-3-Methylbenzyliden]-hydrazin. Sm. 130–150° (B. 37, 3926 C. 1904 [2] 1595).
- $C_{18}H_{17}O_6N$  \*1) Corydinsäure +  $\frac{1}{2}H_2O$  (Soc. 83, 620 C. 1903 [1] 1364).  
 5) 2<sup>3</sup>,2<sup>4</sup>,6-Trimethyläther d. 3-Oximido-6-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 168° u. Zers. (B. 37, 780 C. 1904 [1] 1156).  
 6) 2<sup>4</sup>,5,7-Trimethyläther d. 3-Oximido-5,7-Dioxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 189–190° u. Zers. (B. 37, 2097 C. 1904 [2] 121).  
 7) 2<sup>3</sup>,7,8-Trimethyläther d. 3-Oximido-7,8-Dioxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 170° u. Zers. (B. 37, 2629 C. 1904 [2] 539).  
 8) 2<sup>3</sup>,7,8-Trimethyläther d. 3-Oximido-7,8-Dioxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 168° u. Zers. (B. 37, 2632 C. 1904 [2] 540).  
 9) Aldehyd (aus Bebeerin). Sm. 255° (Ar. 236, 538). — \*III, 621.
- $C_{18}H_{17}O_7N$  13)  $\alpha$ -[4-Methoxyphenyl]  $\beta$ -[2-Nitro-3,4-Dimethoxyphenyl]akrylsäure. Sm. 230–231° (B. 35, 4404 C. 1903 [1] 342).  
 14) Säure (aus Bebeerin). Sm. 270° (Ar. 236, 538). — \*III, 621.
- $C_{18}H_{17}N_4J$  2) 2-Jodmethylat d. 3-Methyl-1,4-Diphenylbipyrazol. Sm. 221° (B. 36, 528 C. 1903 [1] 642).
- $C_{18}H_{18}ON_2$  \*14) 7-[4-Dimethylamidophenyl]amido-2-Oxynaphtalin. Sm. 126–127° (J. pr. [2] 69, 242 C. 1904 [1] 1269).  
 16) 2-Amido-5-Oxy-3,7,10-Trimethyl-5,10-Dihydroakridin. Sm. 210° (Soc. 85, 532 C. 1904 [1] 1525).
- $C_{18}H_{18}ON_4$  6) Amid d. 1-[Methyl- $\alpha$ -Carboxyäthylamido]-4-[ $\alpha$ -Cyanbenzyliden]-amidobenzol. Sm. 154° (B. 36, 761 C. 1903 [1] 963).
- $C_{18}H_{18}O_2N_4$  7) Äthyläther d. 5-Keto-4-[4-Oxyphenyl]-3-Methyl-1-Phenyl-4,5-Dihdropyrazol. Sm. 159° (D.R.P. 153861 C. 1904 [2] 680).
- $C_{18}H_{18}O_2N_6$  C 61,7 — H 5,1 — O 9,1 — N 24,0 — M. G. 350.  
 1) 4,5-Di[ $\alpha$ -Phenylhydrazonäthyl]-1,2,3,6-Dioxiazin. Sm. 175° (C. 1903 [2] 1433).
- $C_{18}H_{18}O_3N_2$  16)  $\alpha$ -Keto- $\alpha\beta$ -Di[Acetylamidophenyl]äthan. Sm. 272° (A. 325, 75 C. 1903 [1] 463).  
 17) 3-Methyläther-4-Äthyläther d. 1-Nitrosamido-2-[3,4-Dioxyphenyl]indol (B. 37, 873 C. 1904 [1] 1154).  
 18) Acetat d. 4-Oxy-3-Acetylphenylhydrazonmethyl-1-Methylbenzol. Sm. 149° (B. 35, 4106 C. 1903 [1] 149).
- $C_{18}H_{19}O_3N_4$  2) Benzylidenhydrazid d. Benzoylamidoacetylamidoessigsäure. Sm. 215–217° (J. pr. [2] 70, 79 C. 1904 [2] 1033).
- $C_{18}H_{19}O_4N_2$  \*9) Diäthylester d. Azobenzol-3,3'-Dicarbonsäure. Sm. 109° (corr.) (A. 326, 341 C. 1903 [1] 1130).  
 \*10) Diäthylester d. Azobenzol-4,4'-Dicarbonsäure. Sm. 145,5° (A. 326, 332 C. 1903 [1] 1130).  
 17)  $\alpha$ -Benzoylamidoacetyl- $\beta$ -Phenylpropionsäure. Sm. 172°. Ag (J. pr. [2] 70, 226 C. 1904 [2] 1461).  
 18) Äthylester d.  $\alpha\beta$ -Dibenzoylhydrazidoessigsäure. Sm. 112–113° (J. pr. [2] 70, 277 C. 1904 [2] 1544).
- $C_{18}H_{19}O_4N_4$  \*8) Di[Benzylidenhydrazid] d. d- $\alpha\beta$ -Dioxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 230° u. Zers. (Soc. 83, 1364 C. 1904 [1] 84).
- $C_{18}H_{19}O_4Cl_4$  2)  $\alpha\beta$ -Diäthyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]-äthan. Sm. 183–184° (A. 325, 59 C. 1903 [1] 462).
- $C_{18}H_{19}O_4Br_2$  1) Tetramethyläther d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthen. Sm. 208° (A. 329, 47 C. 1903 [2] 1448).
- $C_{18}H_{19}O_4S$  2) 5-Diacetat d. 4-Merkapto-2,5-Dioxy-1-Methylbenzol-4-Benzyläther. Sm. 120–122° (A. 336, 164 C. 1904 [2] 1300).
- $C_{18}H_{19}O_5N_2$  \*1) Diäthylester d. Azoxybenzol-3,3'-Dicarbonsäure. Sm. 78° (A. 326, 342 C. 1903 [1] 1130).

- $C_{18}H_{18}O_5N_2$  \*7) Diäthylester d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. 76—77° (A. 326, 345 C. 1903 [1] 1130).  
 8) Diäthylester d. Azoxybenzol-4,4'-Dicarbonsäure. Sm. 114,5° (122,5°) (A. 326, 334 C. 1903 [1] 1130; Am. 32, 398 C. 1904 [2] 1499).
- $C_{18}H_{18}O_6N_2$  7) Dicyanmalonbenzoylessigesterlaktam. Sm. 194° (A. 332, 131 C. 1904 [2] 190).  
 8) Aethylester d.  $\beta\beta'$ -Di[4-Nitrophenyl]isobuttersäure. Sm. 104,5° (106—107°) (G. 32 [2] 357 C. 1903 [1] 629; B. 37, 1996 C. 1904 [2] 27).  
 C 57,8 — H 4,8 — O 29,9 — N 7,5 — M. G. 374.
- $C_{18}H_{18}O_7N_2$  1) 3-[6-Oxy-3-Methylcarboxyphenylamid] d. 4-Oxybenzol-1-Carbonsäure-3-Amidoessigsäure-1-Methylester. Sm. 219° (A. 325, 333 C. 1903 [1] 771).  
 C 48,0 — H 4,0 — O 35,6 — N 12,4 — M. G. 450.
- $C_{18}H_{18}O_{10}N_4$  1) Diäthyläther d. p-Tetranitro-4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 142° (Am. 31, 127 C. 1904 [1] 809).
- $C_{18}H_{18}NJ$  1) Jodäthylat d. 4-Benzylisochinolin. Sm. 188—189° (A. 326, 295 C. 1903 [1] 929).
- $C_{18}H_{18}N_2Cl_2$  3) 1,3-Xylylendipyridoniumchlorid. 2 + PtCl<sub>4</sub> (B. 36, 1679 C. 1903 [2] 29).
- $C_{18}H_{18}N_2Br_2$  3) 1,3-Xylylendipyridoniumbromid. Sm. 264°. + Br<sub>4</sub> (B. 36, 1679 C. 1903 [2] 29).
- $C_{18}H_{18}N_3J$  2) Verbindung (aus Phenylbenzylidenhydrazin). Sm. 262°. + 3HgCl<sub>2</sub> + H<sub>2</sub>O, + PtCl<sub>4</sub>, 2 + PtCl<sub>4</sub> (G. 33 [2] 55 C. 1903 [2] 1057).
- $C_{18}H_{19}O_2N$  \*11) Apocodein. Fl. HCl (B. 36, 1592 C. 1903 [2] 53).  
 23)  $\gamma$ -[3-Oxyphenyl]imido- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Hexen. Sm. 152° (B. 36, 4019 C. 1904 [1] 293).  
 24)  $\beta\delta$ -Diketo- $\gamma$ -[ $\alpha$ -Phenylamidobenzyl]pentan. Sm. 113° (Soc. 85, 466 C. 1904 [1] 1080, 1438).  
 25) 3-Methyläther-4-Aethyläther d. 3-Methyl-2-[3,4-Dioxyphenyl]-indol. Sm. 165° (B. 37, 873 C. 1904 [1] 1154).  
 26) Methylapomorphin. + CH<sub>4</sub>O (B. 35, 4388 C. 1903 [1] 339).
- $C_{18}H_{19}O_2N_3$  4)  $\gamma$ -Phenylsemicarbazon- $\alpha$ -[6-Oxy-3-Methylphenyl]- $\alpha$ -Buten + H<sub>2</sub>O. Sm. 177° (B. 37, 3186 C. 1904 [2] 991).
- $C_{18}H_{19}O_2Cl_3$  2)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Di[4-Oxy-2,5-Dimethylphenyl]äthan. Sm. 175 bis 176° (B. 36, 1892 C. 1903 [2] 291).
- $C_{18}H_{19}O_3N$  \*4) Thebenin. HCl + 3H<sub>2</sub>O (B. 36, 3082 C. 1903 [2] 955).  
 \*13) Morpheothebain. Sm. 197° u. Zers. (B. 36, 3083 C. 1903 [2] 955).  
 26) Codeinon. Sm. 185—186°. HCl + H<sub>2</sub>O, Pikrat, Pikrolonat (B. 36, 3070 C. 1903 [2] 953).  
 27) Methylester d.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 125° (B. 36, 942 C. 1903 [1] 1018).  
 28) Methylester d. isom.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 86° (B. 36, 942 C. 1903 [1] 1018).  
 29) Amid d. 1-Oxymethylbenzoleugenoläther-4-Carbonsäure. Sm. 178° (D. R. P. 82924). — \*II, 927.  
 30) Amid d. 1-Oxymethylbenzolisoeugenoläther-4-Carbonsäure. Sm. 191—192° (D. R. P. 82924). — \*II, 927.
- $C_{18}H_{19}O_3N_3$  3) Methyläther d.  $\alpha$ -Oximido- $\alpha$ -[4-Methylbenzoyl]- $\beta$ -[4-Methylphenyl]-oxyhydrazonäthan (R. 16, 333). — \*III, 231.
- $C_{18}H_{19}O_3N_5$  2) Benzylidenhydrazid d.  $\beta$ -Phenylureidoacetylamidoessigsäure. Sm. 243° u. Zers. (J. pr. [2] 70, 256 C. 1904 [2] 1464).
- $C_{18}H_{19}O_4N$  \*15) Apocorydalin. HCl, HJ (Ar. 241, 652 C. 1904 [1] 182).  
 16) 2'-Methyläther-6-Aethyläther d. 4-Oximido-6-Oxy-2-[4-Oxyphenyl]-2,3-Dihydrobenzpyran. Sm. 190—191° (B. 33, 1484). — \*III, 560.  
 17) 4'-Acetat d. 4-[Acetyl-2-Oxybenzyl]amido-1-Oxybenzol-1-Methyläther (Ar. 240, 682 C. 1903 [1] 395).
- $C_{18}H_{19}O_4Cl$  1) Tetramethyläther d.  $\beta$ -Chlor- $\alpha$ -Di[3,4-Dioxyphenyl]äthan. Sm. 98° (A. 329, 44 C. 1903 [2] 1448).
- $C_{18}H_{19}O_5N$  10) Anhydrocotarninresorcin. Sm. 220° u. Zers. HCl (B. 37, 2743 C. 1904 [2] 544).  
 11)  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Amido-3,4-Dimethoxyphenyl]akrylsäure. Sm. 176—177° (B. 35, 4405 C. 1903 [1] 342).

- $C_{18}H_{19}O_8N$  2) 3,4,3',4'-Tetramethyläther d.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha$ - $\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 149—150° (*A.* 329, 52 *C.* 1903 [2] 1448).
- $C_{18}H_{19}N_3S$  1)  $\alpha$ -Benzylidenamido- $\beta$ -Allyl- $\alpha$ -Benzylthioharnstoff. Sm. 106—107° (*B.* 37, 2328 *C.* 1904 [2] 313).
- $C_{18}H_{20}ON_2$  17)  $\alpha$ -Aethylimido- $\alpha$ -Benzoyläthylamido- $\alpha$ -Phenylmethan. Sm. 90 bis 91,5°. (2HCl, PtCl<sub>4</sub>) (*Soc.* 83, 323 *C.* 1903 [1] 581, 876).
- $C_{18}H_{20}O_2N_2$  \*42) Methyläther d. Benzoylimido-2,4,5-Trimethylphenylamidooxy-methan. Sm. 87—89° (*Am.* 32, 365 *C.* 1904 [2] 1507).
- 53) Peroxyd d. anti-2,5-Dimethylbenzaldoxim. Sm. 97—98° u. Zers. (*G.* 32 [2] 481 *C.* 1903 [1] 831).
- 54) 1,3-Xylylendipyridoniumhydroxyd. 2 Chlorid + PtCl<sub>4</sub>, 2 Bromid + Br<sub>4</sub>, 2 Pikrat (*B.* 36, 1679 *C.* 1903 [2] 29).
- 55) d-Benzoylimonen- $\beta$ -Nitrosocyanid. Sm. 107° (*C.* 1904 [2] 440; *Soc.* 85, 932 *C.* 1904 [2] 705).
- 56)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenyl- $\beta$ -Aethylpropan- $\gamma$ -Carbonsäure. Sm. 136° (*C.* 1904 [1] 1258).
- 57) Methyl ester d.  $\alpha$ -[4-Methylphenylimido- $\alpha$ -[Methyl-4-Methylphenyl]amidoessigsäure. Sm. 98—100°. (2HCl, PtCl<sub>4</sub>) (*Soc.* 85, 991 *C.* 1904 [2] 831).
- 58) Aethyl ester d. 4-Methylphenylimido-4-Methylphenylamidoessigsäure. Sm. 98—100°. (2HCl, PtCl<sub>4</sub>) (*Soc.* 85, 991 *C.* 1904 [2] 831).
- $C_{18}H_{20}O_2N_4$  \*11)  $\alpha$ - $\gamma$ -Di[4-Methylphenylnitrosamido]- $\alpha$ -Buten. Sm. 165° (*A.* 329, 222 *C.* 1903 [2] 1428).
- 17) 1,4,5,8-Tetra[Methylamido]-9,10-Anthrachinon (*D. R. P.* 144634 *C.* 1903 [2] 750).
- 18) Aethyl ester d.  $\alpha$ -[2-Methylphenyl]azo- $\alpha$ -[2-Methylphenyl]hydrazon-essigsäure. Sm. 99—100° (*Bl.* [3] 31, 85 *C.* 1904 [1] 580).
- $C_{18}H_{20}O_2Br_2$  3) Di[6-Brom-2,4-Dimethylphenyläther] d.  $\alpha$ - $\beta$ -Dioxyäthan. Sm. 100° (*B.* 36, 2876 *C.* 1903 [2] 834).
- $C_{18}H_{20}O_3N_2$  \*23) Diacetylderivat d. 4-Dimethylamido-3'-Oxydiphenylamin. Sm. 101° (*J. pr.* [2] 69, 234 *C.* 1904 [1] 1269).
- \*24) Diacetylderivat d. 4-Dimethylamido-4'-Oxydiphenylamin. Sm. 131° (*J. pr.* [2] 69, 164 *C.* 1904 [1] 1268).
- 25) 6-Methyläther-4,5-Methylenäther d. 4,5,6-Trioxo-2-[ $\beta$ -Methylamidoäthyl]-1-Phenylimidomethylbenzol (Cotarninanil). Sm. 124° u. Zers. (*B.* 36, 1528 *C.* 1903 [2] 51).
- 26) Codeinonoxim. Sm. 212°. + C<sub>6</sub>H<sub>6</sub>O (*B.* 36, 3072 *C.* 1903 [2] 953).
- 27)  $\alpha$ -[ $\alpha$ -Amido- $\beta$ -Phenylpropionyl]amido- $\beta$ -Phenylpropionsäure + 2H<sub>2</sub>O. Sm. 288° (*B.* 37, 2382 *C.* 1904 [2] 1208).
- 28) Di[Phenylamid] d.  $\alpha$ -Oxybutan- $\alpha$ - $\beta$ -Dicarbonsäure. Sm. 203—204° (*B.* 37, 2382 *C.* 1904 [2] 306).
- 29) s-Dibenzylamid d. d-Aepfelsäure. Sm. 157° (*B.* 37, 2128 *C.* 1904 [2] 439).
- 30) s-Dibenzylamid d. l-Aepfelsäure. Sm. 155,5° (157°) (*Soc.* 83, 1325 *C.* 1904 [1] 82; *B.* 37, 2127 *C.* 1904 [2] 439).
- $C_{18}H_{20}O_3N_4$  8)  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidoäthyl]- $\beta$ -Phenylharnstoff. Sm. 216° (*J. pr.* [2] 70, 121 *C.* 1904 [2] 1037).
- 9) Di[Phenylhydrazon]trioxyhexahydrobenzol. Sm. 209° (*Soc.* 85, 628 *C.* 1904 [2] 329).
- 10) Hydrazid d.  $\alpha$ -Benzoylamidoacetylamido- $\beta$ -Phenylpropionsäure. Sm. 183°. HCl (*J. pr.* [2] 70, 227 *C.* 1904 [2] 1461).
- $C_{18}H_{20}O_4N_2$  \*12) 2-Methylphenylamid d. d-Weinsäure. Sm. 184—185° (*Soc.* 83, 1357 *C.* 1904 [1] 84).
- \*13) 3-Methylphenylamid d. d-Weinsäure. Sm. 184° (*Soc.* 83, 1358 *C.* 1904 [1] 84).
- \*14) 4-Methylphenylamid d. d-Weinsäure. Sm. 240° u. Zers. (*Soc.* 83, 1356 *C.* 1904 [1] 84).
- 22) Diäthylester d. s-Diphenylhydrazin-4,4'-Dicarbonsäure. Sm. 118° (*A.* 326, 333 *C.* 1903 [1] 1130).
- 23) Benzylamid d. d-Weinsäure. Sm. 199° (*Soc.* 83, 1362 *C.* 1904 [1] 84).
- $C_{18}H_{20}O_4Cl_2$  1) Tetramethyläther d.  $\beta$ - $\beta$ -Dichlor- $\alpha$ -Di[3,4-Dioxyphenyl]äthan. Sm. 122° (*A.* 329, 43 *C.* 1903 [2] 1448).
- $C_{18}H_{20}O_5N_2$  C 62,8 — H 5,8 — O 23,3 — N 8,1 — M. G. 344.
- 1) Nitrocodein (Methyläther d. Nitromorphin) (*A.* 77, 341; *H.* 38, 162). — III, 903; \*III, 672.

- $C_{18}H_{20}O_6N_2$  3) Di[Phenylamidoformiat] d. Dulcid. Sm. 233° (*C. r.* 139, 638 *C.* 1904 [2] 1536).
- $C_{18}H_{20}O_8N_2$  \*2) Tetramethyläther d.  $\alpha\beta$ -Di[6-Nitro-3,4-Dioxyphenyl]äthan. Sm. 205 bis 206° (*M.* 23, 890 *C.* 1904 [2] 1313).
- $C_{18}H_{20}N_2S_2$  1) 4,4'-Biphenylenamid d. Thiopropionsäure. Sm. 228—229° (*B.* 37, 876 *C.* 1904 [1] 1004).
- $C_{18}H_{20}N_2S_6$  1) Sulfid d. Aethylphenylamidodithioameisensäure. Sm. 115° (*B.* 36, 2282 *C.* 1903 [2] 560).
- $C_{18}H_{20}N_2S_4$  \*2) Disulfid d. Aethylphenylamidodithioameisensäure. Sm. 170° (*B.* 36, 2274 *C.* 1903 [2] 563).
- $C_{18}H_{20}N_3J$  2) 2-Jodmethylat d. 5-Methylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 194° (*B.* 36, 3277 *C.* 1903 [2] 1189).
- $C_{18}H_{21}ON$  \*9) 4-tert. Amylphenylamid d. Benzolcarbonsäure. Sm. 158° (*A.* 327, 223 *C.* 1903 [1] 1408).
- 10) 1- $\alpha$ -Phenyläthylamid d. d- $\beta$ -Phenylisobuttersäure. Sm. 119—122,5° (*Soc.* 85, 448 *C.* 1904 [1] 1445).
- $C_{18}H_{21}O_2N$  20) Methyläther d. 4-Diäthylamido-3'-Oxydiphenylketon. Sm. 120 bis 121° (*D.R.P.* 65952). — \*III, 153.
- 21) Benzoat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Phenylpropan. HCl (*C. r.* 138, 768 *C.* 1904 [1] 1196).
- 22) Phenylamidoformiat d.  $\beta$ -Oxy- $\delta$ -Phenyl- $\beta$ -Buten. Sm. 143—144° (*B.* 37, 2314 *C.* 1904 [2] 217).
- $C_{18}H_{21}O_2N_5$  C 63,7 — H 6,2 — O 9,4 — N 20,6 — M. G. 339.
- 1)  $\beta$ -Methyl- $\alpha$ -Phenylhydrazid d.  $\alpha$ -Methyloximido- $\beta$ -Phenylhydrazonbuttersäure. Zers. bei 208° (*A.* 328, 69 *C.* 1903 [2] 249).
- $C_{18}H_{21}O_8N$  18)  $\alpha$ -Phenylamidoformiat d.  $\alpha$ -Oxy- $\alpha$ -[3-Oxyphenyl]butan-3-Methyläther. Sm. 63—64° (*B.* 37, 3999 *C.* 1904 [2] 1641).
- 19)  $\alpha$ -Phenylamidoformiat d. 5-Oxy-2-[ $\alpha$ -Oxypropyl]-1-Methylbenzol-5-Methyläther. Sm. 94—95° (*B.* 37, 3994 *C.* 1904 [2] 1640).
- 20)  $\alpha$ -Phenylamidoformiat d. 4-Oxy-3-[ $\alpha$ -Oxypropyl]-1-Methylbenzol-4-Methyläther. Sm. 91° (*B.* 37, 3995 *C.* 1904 [2] 1640).
- 21)  $\alpha$ -Phenylamidoformiat d. 6-Oxy-3-[ $\alpha$ -Oxypropyl]-1-Methylbenzol-6-Methyläther. Sm. 78° (*B.* 37, 3992 *C.* 1904 [2] 1640).
- 22)  $\alpha$ -Phenylamidoformiat d. 2-Oxy-1-[ $\alpha$ -Oxypropyl]benzol-2-Aethyläther. Sm. 95—96° (*B.* 37, 3989 *C.* 1904 [2] 1639).
- $C_{18}H_{21}O_3N_5$  C 60,9 — H 5,9 — O 13,5 — N 19,7 — M. G. 355.
- 1) Phenylamido-4-Nitrophenylhydrazonmethyläther d. 1-Oxyhexahydropyridin. Sm. 211° (*B.* 37, 3237 *C.* 1904 [2] 1153).
- $C_{18}H_{21}O_4N$  12) Oxycodoin. Sm. 207—208° (*B.* 36, 3068 *C.* 1903 [2] 953).
- 13) 4-Aethoxyphenylamidoformiat d. 3,4-Dioxy-1-Propylbenzol. Sm. 122° (*C. r.* 138, 425 *C.* 1904 [1] 798).
- $C_{18}H_{21}O_6N$  2) Verbindung (aus 1,3,5-Trioxylbenzoltrimethyläther). +  $C_2H_6O$ ,  $HNO_3$  (*Ar.* 242, 511 *C.* 1904 [2] 1386).
- $C_{18}H_{21}N_3S_2$  4) Aethyläther d.  $\alpha$ -[ $\beta$ -2-Methylphenylthioureido]- $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Merkaptomethan. Sm. 86—87° (*Am.* 30, 181 *C.* 1903 [2] 873).
- $C_{18}H_{21}ClJ_2$  1)  $\beta$ -Joddi[4-Propylphenyl]jodoniumchlorid. Zers. bei 43°. +  $HgCl_2$ , 2 +  $PtCl_4$  (*A.* 327, 316 *C.* 1903 [2] 354).
- 2)  $\beta$ -Jod-4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumchlorid. Sm. 157° u. Zers. 2 +  $PtCl_4$  (*J. pr.* [2] 69, 443 *C.* 1904 [2] 590).
- $C_{18}H_{21}BrJ_2$  1)  $\beta$ -Joddi[4-Propylphenyl]jodoniumbromid. Sm. 45° (*A.* 327, 316 *C.* 1903 [2] 354).
- 2)  $\beta$ -Jod-4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumbromid. Sm. 151° (*J. pr.* [2] 69, 443 *C.* 1904 [2] 589).
- $C_{18}H_{22}OJ_2$  1)  $\beta$ -Jod-4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumhydroxyd. Salze siehe (*J. pr.* [2] 69, 442 *C.* 1904 [2] 589).
- $C_{18}H_{22}O_2N_2$  18) Diäthyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,4-Dioxyphenyl]äthan. Sm. 109° (*B.* 37, 366 *C.* 1904 [1] 671).
- 19) 3,6-Di[Dimethylamido]-9-Oxy-9-Methylxanthen. Sm. 152°. 2 Chlorid +  $PtCl_4$  (*B.* 27, 2895). — \*III, 569.
- $C_{18}H_{22}O_5N_2$  13) Phenylbenzylhydrazon d. Parasaccharopentose. Sm. 112—114° (*B.* 37, 1201 *C.* 1904 [1] 1197).
- $C_{18}H_{22}O_3N_4$  4) Di[Phenylhydrazon] d. Fukose. Sm. 177,5° (*B.* 37, 3860 *C.* 1904 [2] 1712).

- $C_{13}H_{22}O_6N_4$  5) Di[Phenylhydrazon] d. act. Rhodeose. Sm. 176,5° (B. 37, 3859 C. 1904 [2] 1712).  
6) Di[Phenylhydrazon] d. r-Rhodeose. Sm. 187° (B. 37, 3861 C. 1904 [2] 1712).
- $C_{16}H_{22}O_4N_2$  \*9) Tetramethyläther d. 4,4'-Di[Dioxyethyl]azobenzol (C. r. 138, 289 C. 1904 [1] 722).  
10) Diphenylhydrazon d. Fukose. Sm. 198° (B. 37, 306 C. 1904 [1] 649).  
11) Tetramethyläther d. 2,2'-Di[Dioxyethyl]azobenzol. Sm. 144° (C. r. 138, 289 C. 1904 [1] 722).  
12) Tetramethyläther d. 3,3'-Di[Dioxyethyl]azobenzol. Sm. 86° (C. r. 138, 289 C. 1904 [1] 722).  
13) Tetramethyläther d. 4,4'-Di[Dioxyethyl]azobenzol. Sm. 118°; Sd. 250°<sub>15-20</sub> (Bl. [3] 31, 453 C. 1904 [1] 1498).
- $C_{18}H_{22}O_4N_4$  19) Di[Phenylhydrazon] d. Cocaose. Sm. 179—180° (J. pr. [2] 66, 408 C. 1903 [1] 527).
- $C_{18}H_{22}O_4S_2$  \*1)  $\alpha\beta$ -Di[2,4-Dimethylphenylsulfon]äthan. Sm. 163° (J. pr. [2] 68, 311 C. 1903 [2] 1115).
- $C_{18}H_{22}O_7N_2$  C 57,1 — H 5,8 — O 29,6 — N 7,4 — M. G. 378.  
1) Hexamethyläther d. 2,4,6,2',4',6'-Hexaoxydiphenylnitrosamin. Sm. 193° (Ar. 242, 510 C. 1904 [2] 1386).
- $C_{18}H_{22}NBr$  1) Methylallylbenzyl-4-Methylphenylammoniumbromid. Sm. 146 bis 147° u. Zers. (B. 37, 2723 C. 1904 [2] 592).
- $C_{18}H_{22}NJ$  3) Methylallylbenzyl-2-Methylphenylammoniumjodid. Sm. 154—155° (B. 37, 3897 C. 1904 [2] 1612).  
4) isom. Methylallylbenzyl-2-Methylphenylammoniumjodid (B. 37, 3898 C. 1904 [2] 1612).  
5) Methylallylbenzyl-4-Methylphenylammoniumjodid. Zers. bei 144—146° (Ph. Ch. 45, 238 C. 1903 [2] 592; B. 37, 2723 C. 1904 [2] 592).  
6) Jodäthylat d. 1-Benzyl-1,2,3,4-Tetrahydrochinolin. Sm. 105—106° (Soc. 83, 1417 C. 1904 [1] 439).
- $C_{18}H_{22}ClJ$  2) Di[4-Propylphenyl]jodoniumchlorid. Sm. 143°. +  $HgCl_2$ , 2 +  $PtCl_4$  (A. 327, 310 C. 1903 [2] 353).  
3) 4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumchlorid. Sm. 120°. +  $HgCl_2$ , 2 +  $PtCl_4$  (J. pr. [2] 69, 441 C. 1904 [2] 589).
- $C_{18}H_{22}BrJ$  2) Di[4-Propylphenyl]jodoniumbromid. Sm. 158° (A. 327, 311 C. 1903 [2] 353).  
3) 4,4'-Dimethyl-2,2'-Diäthyljodoniumbromid. Sm. 162° (J. pr. [2] 69, 440 C. 1904 [2] 589).
- $C_{18}H_{26}ON$  \*1) Methylphenylamidomethylencampher (C. r. 136, 1223 C. 1903 [2] 116).  
3) Methylallylbenzyl-4-Methylphenylammoniumhydroxyd. Salze siehe (B. 37, 2720 C. 1904 [2] 592).  
4) Äthylhydroxyd d. 1-Benzyl-1,2,3,4-Tetrahydrochinolin. d-Campher-sulfonat (Soc. 83, 1418 C. 1904 [1] 439).
- $C_{18}H_{28}OJ$  2) Di[4-Propylphenyl]jodoniumhydrat. Salze siehe (A. 327, 310 C. 1903 [2] 353).  
3) 4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumhydroxyd. Salze siehe (J. pr. [2] 69, 440 C. 1904 [2] 589).
- $C_{18}H_{28}O_4N$  7) Äthylester d. isom. Benzoylcegonin. Sm. 110—111° (C. 1899 [1] 848). — \*III, 645.
- $C_{18}H_{28}O_6N$  2) Anhydrocotarninacetylaceton. Sm. 147—149°. HCl, (2HCl,  $PtCl_4$ ) (B. 37, 2746 C. 1904 [2] 545).
- $C_{18}H_{28}O_6N$  2) Hexamethyläther d. 2,4,6,2',4',6'-Hexaoxydiphenylamin. Sm. 142° (Ar. 242, 509 C. 1904 [2] 1386).  
3) Äthylester d. Anhydrocotarninacetessigsäure. Sm. 59—60°. HCl, (2HCl,  $PtCl_4$ ) (B. 37, 2746 C. 1904 [2] 545).  
4) Diäthylester d. Anhydrohydrastininmalonsäure. Sm. 55—57° (B. 37, 2742 C. 1904 [2] 544).
- $C_{18}H_{24}O_4N_2$  2) Tetramethyläther d.  $\alpha\beta$ -Di[2-Dioxyethylphenyl]hydrazin. Sm. 115° (C. r. 138, 289 C. 1904 [1] 722; Bl. [3] 31, 871 C. 1904 [2] 661).  
C 55,1 — H 6,1 — O 24,5 — N 14,3 — M. G. 392.
- $C_{18}H_{24}O_6N_4$  1)  $\alpha$ -[ $\alpha$ -Benzoylamidoacetyl]amidobisamidopropion- $\gamma$ -amidopropion-säure. Sm. 230° (J. pr. [2] 70, 127 C. 1904 [2] 1115).

- $C_{18}H_{24}O_{10}N_2$  C 50,4 — H 5,6 — O 37,4 — N 6,6 — M. G. 428.]
- $C_{18}H_{25}ON_3$  1) Dimethylester d.  $\delta\epsilon$ -Diacetoximido- $\gamma\zeta$ -Diketo- $\beta\eta$ -Dimethyloktan- $\beta\eta$ -Dicarbonsäure (Soc. 83, 1261 C. 1903 [2] 1423).  
2) Semicarbazone d. Benzyltanacetone. Sm. 195° (B. 36, 4370 C. 1904 [1] 455).
- $C_{18}H_{25}O_3Br$  1) Verbindung (aus Cholsäure). Sm. 130° u. Zers. (C. 1903 [2] 728).  
 $C_{18}H_{25}O_4N$  C 67,7 — H 7,8 — O 20,1 — N 4,4 — M. G. 319.  
1) Hydroxylaminderivat d. 1-Piperonylidenmenthon. Sm. 173—174° (C. 1904 [2] 1046).  
C 75,5 — H 9,1 — O 5,6 — N 9,8 — M. G. 286.
- $C_{18}H_{26}ON_2$  1)  $\alpha$ -[4-Methylphenyl]- $\beta$ -Bornylharnstoff. Sm. 198° (Soc. 85, 1192 C. 1904 [2] 1125).  
C 61,7 — H 7,4 — O 22,9 — N 8,0 — M. G. 350.
- $C_{18}H_{26}O_2Br_2$  1) Benzoe d.  $\alpha\beta$ - oder - $\beta\gamma$ -Dibrom- $\beta$ -Oxyundekan. Fl. (Soc. 81, 150 C. 1903 [1] 436).  
 $C_{18}H_{26}O_5N_2$  C 61,7 — H 7,4 — O 22,9 — N 8,0 — M. G. 350.  
1)  $\alpha$ -[ $\alpha$ -Carbäthoxylamidoisocapronyl]amido- $\beta$ -Phenylpropionsäure. Sm. 140—141,5° (B. 37, 3310 C. 1904 [2] 1306).  
C 48,0 — H 5,8 — O 21,3 — N 24,9 — M. G. 450.
- $C_{18}H_{26}O_6N_8$  1) Tetraacetylderivat d. Verb.  $C_{10}H_{18}O_2N_8$ . Sm. 178° u. Zers. (B. 36, 1300 C. 1903 [1] 1256).  
 $C_{18}H_{26}O_8S_2$  1) Diäthylester d. 1,3-Phenylendi[ $\alpha$ -Sulfonbuttersäure]. Sm. 96° (J. pr. [2] 68, 328 C. 1903 [2] 1171).
- $C_{18}H_{27}O_3N$  3) Hydroxylaminderivat d. 1-p-Anisylidenmenthon. Sm. 165—166° (C. 1904 [2] 1046).  
4) 4-Methylphenylmonamid d. cis- $\beta\zeta$ -Dimethylheptan- $\gamma\delta$ -Dicarbonsäure. Sm. 156—157° (Am. 30, 238 C. 1903 [2] 934).
- $C_{18}H_{27}O_4N$  3) Methoxyhydrat d. Atropin. Nitrat, Sulfat (D.R.P. 138443 C. 1903 [1] 427).  
4) 2-Nitrophenylester d. Laurinsäure. Sm. 35—36° (A. 332, 205 C. 1904 [2] 211).
- $C_{18}H_{27}O_{14}N$  \*1) Chondroitin (H. 37, 411 C. 1903 [1] 1146).  
 $C_{18}H_{29}O_2N$  3) Phenylamidoformiat d.  $\alpha$ -Oxyundekan. Sm. 55—55,5° (Bl. [3] 31, 51 C. 1904 [1] 507).  
4) Phenylamid d.  $\alpha$ -Oxyundekan- $\alpha$ -Carbonsäure. Sm. 83° (Bl. [3] 29, 1127 C. 1904 [1] 261).  
5) 2-Oxyphenylamid d. Laurinsäure. Sm. 68—69° (A. 332, 206 C. 1904 [2] 211).
- $C_{18}H_{30}ON_2$  C 74,5 — H 10,3 — O 5,5 — N 9,6 — M. G. 290.  
1) Phenylhydrazid d. Laurinsäure. Sm. 105° (Bl. [3] 29, 1122 C. 1904 [1] 259).
- $C_{18}H_{30}O_4N_2$  C 63,9 — H 8,9 — O 18,9 — N 8,3 — M. G. 338.  
1) Verbindung (aus Nitrosodihydrolaurilaktam). Sm. 327—328° (Am. 32, 1223 C. 1904 [2] 1223).
- $C_{18}H_{32}O_3Br_4$  7) Elaeomargarinsäuretetraabromid. Sm. 114° (Soc. 83, 1044 C. 1903 [2] 657).  
 $C_{18}H_{33}ON$  C 77,4 — H 11,8 — O 5,7 — N 5,0 — M. G. 279.  
1) Amid d.  $\alpha$ -Heptadeken- $\alpha$ -Carbonsäure. Sm. 107—108° (G. 34 [2] 85 C. 1904 [2] 694).  
2) Amid d. Chaulmoograsäure. Sm. 106° (Soc. 85, 855 C. 1904 [2] 348, 604).
- $C_{18}H_{33}O_3Br$  \*1) Bromölsäure (J. pr. [2] 67, 308 C. 1903 [1] 1404).  
3) Bromdihydrochaulmoograsäure. Sm. 36—38° (Soc. 85, 856 C. 1904 [2] 348, 856).
- $C_{18}H_{34}O_2Br_2$  \*1) Dibromstearinsäure (aus Elaïdinsäure). Sm. 26—28° (J. pr. [2] 67, 291 C. 1903 [1] 1404).  
5)  $\alpha\beta$ -Dibromstearinsäure. Sm. 72° (G. 34 [2] 85 C. 1904 [2] 694).  
C 57,7 — H 9,1 — O 25,7 — N 7,5 — M. G. 374.
- $C_{18}H_{34}O_6N_2$  1) Nitrit d. Nitrooxystearinsäure. Sm. 85—87° (C. 1904 [1] 260).  
 $C_{18}H_{34}N_2J_2$  1) Jodmethylat-Jodäthylat d. Spartein. Sm. 239° (Ar. 242, 516 C. 1904 [2] 1412).  
2) isom. Jodmethylat-Jodäthylat d. Spartein. Sm. 246° (Ar. 242, 516 C. 1904 [2] 1412).
- $C_{18}H_{35}ON$  4) Nitril d.  $\alpha$ -Oxyheptadeken- $\alpha$ -Carbonsäure. Sm. 61,5—62,5° (Soc. 85, 834 C. 1904 [2] 509).

- $C_{18}H_{35}OCl$  2) Chlorid d. *l*-Isostearinsäure. Fl. (*Ar.* 241, 18 *C.* 1903 [1] 698).  
 $C_{18}H_{35}O_2Br$  \*1)  $\alpha$ -Bromstearinsäure. Sm. 57—58° (*G.* 34 [2] 79 *C.* 1904 [2] 693).  
 $C_{18}H_{35}O_2Cl$  3)  $\beta$ -Chloräthylester d. Palmitinsäure. Sm. 44°; Sd. 138° (*B.* 36, 4340 *C.* 1904 [1] 433).  
 $C_{18}H_{35}O_2Br$  3)  $\beta$ -Bromäthylester d. Palmitinsäure. Sm. 62°; Sd. 144° (*B.* 36, 4340 *C.* 1904 [1] 433).  
 $C_{18}H_{35}O_2J$  \*1)  $\alpha$ -Jodstearinsäure. Sm. 66° (*G.* 34 [2] 80 *C.* 1904 [2] 693).  
 $C_{18}H_{35}O_3N$  6)  $\gamma$ -Oximidoheptadekan- $\alpha$ -Carbonsäure. Sm. 85° (*C.* 1903 [1] 826; *J. pr.* [2] 67, 418 *C.* 1903 [1] 1405).  
7) Tetradekylmonamid d. Bernsteinsäure. Sm. 123° (*C.* 1903 [1] 826; *C.* 63,3 — H 10,3 — O 14,1 — N 12,3 — M. G. 341).  
 $C_{18}H_{35}O_3N_3$  1) Myristat d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 111—112° (*C. r.* 138, 1275 *C.* 1904 [2] 94).  
 $C_{18}H_{35}O_3N$  C 62,6 — H 10,1 — O 23,2 — N 4,1 — M. G. 345.  
 $C_{18}H_{35}O_3N_7$  1)  $\beta$ -Nitrooxystearinsäure. Fl. (*C.* 1904 [1] 260).  
C 50,3 — H 8,2 — O 18,6 — N 22,8 — M. G. 429.  
1) Verbindung (aus Trypsin). 4HNO<sub>3</sub> + 2AgNO<sub>3</sub> (*H.* 25, 190). — \*III, 689.  
 $C_{18}H_{37}ON_3$  C 69,4 — H 11,9 — O 5,1 — N 13,5 — M. G. 311.  
1)  $\alpha$ -Semicarbazonheptadekan. Sm. 107—108° (*Noc.* 85, 833 *C.* 1904 [1] 638 *C.* 1904 [2] 509).  
 $C_{18}H_{37}O_2N$  4) Amid d.  $\alpha$ -Oxyheptadekan- $\alpha$ -Carbonsäure. Sm. 148—149° (*Noc.* 85, 831 *C.* 1904 [2] 509).  
 $C_{18}H_{37}O_3N$  C 68,6 — H 11,7 — O 15,2 — N 4,4 — M. G. 315.  
1)  $\beta$ -Amidooxystearinsäure. HCl (*C.* 1904 [1] 260).  
 $C_{18}H_{39}N_3P$  1) Diisobutylamidodi[1-Piperidyl]phosphin. Fl. (*A.* 326, 171 *C.* 1903 [1] 762).  
 $C_{18}H_{42}N_3P$  1) Tri[Dipropylamido]phosphin. Sd. 310—315° (*A.* 326, 170 *C.* 1903 [1] 762).

## — 18 IV —

- $C_{18}H_5O_{12}N_6J_5$  1) 2 Molec. 2,4[oder 4,6]-Dijod-1,3-Dinitrobenzol + 2,4,6-Trijod-1,3-Dinitrobenzol. Sm. 182° (*Am.* 32, 306 *C.* 1904 [2] 1385).  
 $C_{18}H_6O_6N_2Cl_4$  1) Tetrachlorbisdioxymethylenindigo (*B.* 36, 2934 *C.* 1903 [2] 888).  
 $C_{18}H_6O_4Cl_6P$  1) Tri[ $\beta$ -Dichlorphenylester] d. Phosphorsäure. Sm. 96° (*D.R.P.* 142832 *C.* 1903 [2] 171).  
 $C_{18}H_{10}ON_2Br_4$  1) Tetrabromdihydro- $\beta$ -Chinophtalin. Sm. 78° (*B.* 37, 3022 *C.* 1904 [2] 1410).  
 $C_{18}H_{10}O_2NBr$  2) Bromisochinophtalon. Sm. 275° (*B.* 37, 3020 *C.* 1904 [2] 1410).  
 $C_{18}H_{11}ON_2Br$  3) 3-Brom-7[oder 8]-Phenylhydrazon-8[oder 7]-Ketonaphtacen. Sm. 153° (*A.* 327, 89 *C.* 1903 [1] 1228).  
 $C_{18}H_{12}ON_4Br_2$  1)  $\beta$ -Di[2-Bromphenylazo]-1-Oxybenzol. Sm. 160° (*B.* 36, 3864 *C.* 1904 [1] 91).  
2)  $\beta$ -Di[3-Bromphenylazo]-1-Oxybenzol. Sm. 162—163° (*B.* 36, 3867 *C.* 1904 [1] 92).  
 $C_{18}H_{12}O_2N_2Br_2$  2) 3,6-Dibrom-4,5-Di[Phenylamido]-1,2-Benzochinon. Sm. 160°. + CH<sub>3</sub>O, + C<sub>6</sub>H<sub>5</sub>O, + Anilin (*B.* 35, 3852 *C.* 1903 [1] 26; *Am.* 30, 526 *C.* 1904 [1] 366).  
 $C_{18}H_{12}O_3N_4S$  1) Homofluorindin-2-Sulfonsäure (*B.* 36, 4034 *C.* 1904 [1] 295).  
 $C_{18}H_{12}O_4Cl_3P$  2) Tri[ $\beta$ -Chlorphenylester] d. Phosphorsäure. Sm. 118° (*D.R.P.* 142832 *C.* 1903 [2] 171).  
 $C_{18}H_{12}O_4Cl_4Br_2$  1) Diacetat d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 218° (*A.* 325, 66 *C.* 1903 [1] 463).  
 $C_{18}H_{13}ONS_2$  1) 2-Thiocarbonyl-4-Keto-3-Phenyl-5-Cinnamylidentetrahydrothiazol. Sm. 217° (*M.* 24, 513 *C.* 1903 [2] 837).  
 $C_{18}H_{13}ON_4Br$  1) 3-Phenylazo-4-[4-Bromphenyl]azo-1-Oxybenzol. Sm. 115° (*B.* 36, 4116 *C.* 1904 [1] 272).  
 $C_{18}H_{13}O_3NS_2$  1) Acetat d. 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-Phenyltetrahydrothiazol. Sm. 202° (*M.* 25, 166 *C.* 1904 [1] 884).  
 $C_{18}H_{13}O_5N_4Cl$  1) 1-Acetylamido-2-[5-Chlor-2,4-Dinitrophenyl]amidonaphtalin (*B.* 37, 3888 *C.* 1904 [2] 1654).  
 $C_{18}H_{14}ONCl$  2) Chlormethylat d. 7-Oxy-1,2-Naphtakridin (*B.* 37, 3081 *C.* 1904 [2] 1474).

- $C_{18}H_{14}N_2ClJ$  1) 4-Phenylazodiphenyljodoniumchlorid. Sm. 205°. +  $HgCl_2$ , 2 +  $PtCl_4$  (B. 37, 1313 C. 1904 [1] 1341).
- $C_{18}H_{14}N_2BrJ$  1) 4-Phenylazodiphenyljodoniumbromid. Sm. 135° (B. 37, 1314 C. 1904 [1] 1341).
- $C_{18}H_{16}ON_2J$  1) 4-Phenylazodiphenyljodoniumhydroxyd. Salze siehe (B. 37, 1313 C. 1904 [1] 1341).
- $C_{18}H_{16}O_2NS$  \*1) Diphenylamid d. Benzolsulfonsäure. Sm. 122—123° (B. 36, 2706 C. 1903 [2] 829).
- $C_{18}H_{16}O_2N_2J$  1) Jodmethylat d.  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 237° (B. 36, 1670 C. 1903 [2] 49).
- $C_{18}H_{16}O_4NCl_4$  1) 3, 4, 5, 6 - Tetrachlor - 4' - Diäthylamido - 2' - Oxydiphenylketon-2-Carbonsäure (D.R.P. 118077 C. 1901 [1] 602). — \*II, 1094.
- $C_{18}H_{16}O_4NBr_2$  1) Methylester d.  $\gamma$ - $\delta$ -Dibrom- $\alpha$ -[4-Nitrophenyl]- $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 133—136° (A. 336, 220 C. 1904 [2] 1733).
- $C_{18}H_{16}O_4NS_2$  \*2) Phenylimid d. Benzolsulfonsäure. Sm. 143—144° (C. r. 137, 714 C. 1903 [2] 1428).
- $C_{18}H_{16}O_5NS$  2) 4-Methylbenzolsulfonat d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\beta$ -Phenylakrylsäuremethylester. Sm. 97—98° (Bl. [3] 31, 339 C. 1904 [1] 1135).
- $C_{18}H_{16}O_{15}N_7S$  1) O-Amyläther-S-2, 4, 6-Trinitrophenyläther d. 2, 4, 6-Trinitrophenylimidomerkaptooxymethan. Sm. 138,5° (Soc. 85, 649 C. 1904 [2] 310).
- $C_{18}H_{16}O_9N_2Br_2$  2) 4, 8-Dibrom-1, 5-Di[Dimethylamido]-9, 10-Anthrachinon. Sm. 236° (D.R.P. 146691 C. 1903 [2] 1352).
- $C_{18}H_{16}O_9N_4S$  1) 2-[4-Dimethylamidophenyl]imido-4-Keto-5-[4-Nitrobenzyliden]-tetrahydrothiazol (C. 1903 [1] 1258).
- $C_{18}H_{16}O_3ClBr$  \*1)  $\delta$ -Acetat d. isom.  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha$ - $\delta$ -Dioxy- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten ( $\alpha$ -Acetylchlorbromdiphenacyl). Sm. 122° (B. 36, 2398 C. 1903 [2] 498).
- \*2)  $\delta$ -Acetat d. isom.  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha$ - $\delta$ -Dioxy- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten ( $\beta$ -Acetylchlorbromdiphenacyl). Sm. 91° (B. 36, 2397 C. 1903 [2] 498).
- 3)  $\delta$ -Acetat d. isom.  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha$ - $\delta$ -Dioxy- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 104° (114°) (B. 36, 2396 C. 1903 [2] 498).
- $C_{18}H_{16}O_4N_2S_2$  \*6) Di[Phenylamid] d. Benzol-1, 3-Disulfonsäure. Sm. 150° (Soc. 85, 1187 C. 1904 [2] 1115).
- $C_{18}H_{16}O_4N_2S_3$  1) Diacetylderivat d. Farbstoffs  $C_{14}H_{12}O_2N_2S_3$  (J. pr. [2] 69, 170 C. 1904 [1] 1268).
- $C_{18}H_{16}O_6N_8Br$  1) 3-Brom- $\beta$ -Dinitro-4'-[1-Piperidyl]diphenylketon. Sm. 76° u. Zers. (B. 37, 3486 C. 1904 [2] 1131).
- $C_{18}H_{17}ON_5S$  1) 1-Benzylidenamido-2-Thiocarbonyl-4-Keto-5-Dimethyl-3-Phenyltetrahydroimidazol. Sm. 135° (C. 1904 [2] 1027).
- $C_{18}H_{17}ON_4Cl$  2) Äthyläther d. 5-Chlor-4-[4-Oxyphenyl]-3-Methyl-1-Phenylpyrazol. Sm. 123° (D.R.P. 153861 C. 1904 [2] 680).
- $C_{18}H_{17}O_2NBr_2$  1) Acetat d. 1-[3, 5-Dibrom-2-Oxybenzyl]-1, 2, 3, 4-Tetrahydrochinolin. Sm. 105° (A. 332, 224 C. 1904 [2] 203).
- $C_{18}H_{17}O_2N_2P$  \*1) Di[Phenylamid] d. Phosphorsäuremonophenylester. Sm. 179,5° (169°) (A. 326, 247 C. 1903 [1] 868).
- $C_{18}H_{17}O_3NS$  6) 2-[2, 4-Dimethylphenyl]amidonaphtalin-6-Sulfonsäure (C. 1904 [1] 1013).
- $C_{18}H_{17}O_3N_4P$  1) Di[Phenylamid]-3-Nitrophenylamid d. Phosphorsäure. Sm. 177° (A. 326, 237 C. 1903 [1] 867).
- 2) Di[Phenylamid]-4-Nitrophenylamid d. Phosphorsäure. Sm. 272° (A. 326, 237 C. 1903 [1] 867).
- $C_{18}H_{17}O_4NCl_2$  1) 3, 6-Dichlor-4'-Diäthylamido-2'-Oxydiphenylketon-2-Carbonsäure (D.R.P. 118077 C. 1901 [1] 602). — \*II, 1094.
- $C_{18}H_{17}O_4NS$  3) 2-[4-Aethoxylphenyl]amidonaphtalin-6-Sulfonsäure.  $NH_4$  (C. 1904 [1] 1013).
- 4) 2-[4-Aethoxylphenyl]amidonaphtalin-8-Sulfonsäure (C. 1904 [1] 1013).
- $C_{18}H_{17}O_5NS$  2) 7-[4-Aethoxylphenyl]amido-1-Oxynaphtalin-3-Sulfonsäure (C. 1904 [1] 1013).
- $C_{18}H_{18}ONJ$  1) Jodmethylat d. 4-[4-Oxybenzyl]isochinolin-4-Methyläther. Sm. 219° u. Zers. (A. 326, 296 C. 1903 [1] 929).
- $C_{18}H_{18}ON_3P$  \*2) Tri[Phenylamid] d. Phosphorsäure (C. r. 139, 206 C. 1904 [2] 647).
- $C_{18}H_{18}ON_4S_2$  3) 1-Phenylthioureido-2-Thiocarbonyl-4-Keto-5-Dimethyl-3-Phenyltetrahydroimidazol. Zers. bei 233° (C. 1904 [2] 1027).

- $C_{18}H_{18}O_2NCl$  1)  $\alpha$ -[3-Chlorphenyl]amido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 93–94° (Soc. 85, 1175 C. 1904 [2] 1215).  
2)  $\alpha$ -[4-Chlorphenyl]amido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 99° (Soc. 85, 1175 C. 1904 [2] 1215).
- $C_{18}H_{18}O_2N_2Br_4$  1) 1,4-Di[3,5-Dibrom-2-Oxybenzyl]hexahydro-1,4-Diazin. Sm. 240 bis 242° (A. 332, 222 C. 1904 [2] 203).
- $C_{18}H_{18}O_2N_2S$  2) 2-Acetat d. 2-Merkapto-6-Oxy-1-[4-Methylphenyl]benzimidazol-6-Aethyläther. Sm. 145° (B. 36, 3851 C. 1904 [1] 89).
- $C_{18}H_{18}O_2NBr$  1)  $\alpha$ -[ $\alpha$ -Brom- $\beta$ -Phenylpropionyl]amido- $\beta$ -Phenylpropionsäure. Sm. 174–175° (B. 37, 3068 C. 1904 [2] 1208).
- $C_{18}H_{19}ON_2J$  2) Jodmethylat d. 2-Acetylamido-3,7-Dimethylakridin (Soc. 85, 532 C. 1904 [1] 1525).
- $C_{18}H_{19}O_2NBr_2$  1) N-Acetyl-2,4,5-Trimethylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 120–121° (A. 332, 198 C. 1904 [2] 210).  
2) Acetat d. Methylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 102–103° (A. 334, 305 C. 1904 [2] 986).
- $C_{18}H_{19}O_2N_3S_3$  1) Verbindung (aus 4-Nitrobenzoylchlorid u. Methyläthylphenylthiuramsulfid). Sm. 138° (B. 36, 2284 C. 1903 [2] 561).
- $C_{18}H_{19}O_3NS$  1) 4-[4-Methylphenyl]merkapto-2-Methylphenylamid d. Oxalsäuremonoäthylester. Sm. 113–114° (J. pr. [2] 68, 283 C. 1903 [2] 994).  
2) 4-[4-Methylphenyl]merkapto-3-Methylphenylamid d. Oxalsäuremonoäthylester. Sm. 113° (J. pr. [2] 68, 283 C. 1903 [2] 995).
- $C_{18}H_{19}O_3N_2Br$  1) 6-Methyläther-4,5-Methylenäther d. 3-Brom-4,5,6-Trioxo-2-[ $\beta$ -Methylamidoäthyl]-1-Phenylimidomethylbenzol (Bromcotarninil). Sm. 127° (B. 36, 1535 C. 1903 [2] 52).
- $C_{18}H_{19}N_2JS$  1) 2-Jodmethylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Benzyläther. Sm. 174–175° (A. 331, 203 C. 1904 [1] 1218).
- $C_{18}H_{20}ON_2S_2$  2) 5-Methyläther-2-Aethyläther d. 5-Merkapto-2-Oxy-2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 83° (J. pr. [2] 67, 260 C. 1903 [1] 1266).
- $C_{18}H_{20}O_2NBr$  3) Brommethylat d. Apomorphin (Eupophin). Sm. 180° (C. 1904 [1] 1581).
- $C_{18}H_{20}O_2N_2Se_2$  2) Di[4-Methylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbon-säure. Sm. 174° (Ar. 241, 217 C. 1903 [2] 104).  
3) Di[2-Methylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbon-säure. Sm. 174–175° (Ar. 241, 204 C. 1903 [2] 104).  
4) Di[3-Methylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbon-säure. Sm. 158° (Ar. 241, 206 C. 1903 [2] 104).  
5) Di[4-Methylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbon-säure. Sm. 174° (Ar. 241, 206 C. 1903 [2] 104).
- $C_{18}H_{20}O_3N_4Br_2$  1) Di[4-Bromphenylhydrazon] d. Rhamnose. Sm. 215° u. Zers. (Soc. 83, 1287 C. 1904 [1] 86).
- $C_{18}H_{20}O_3N_4S$  1) Dimethyläther d. Acetyl-di[2-Oxyphenyl]thiohexandiamin. Sm. 205–206° (B. 36, 3324 C. 1903 [2] 104).
- $C_{18}H_{20}O_4N_2Se_2$  1) Di[2-Methoxyphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbon-säure. Sm. 124° (Ar. 241, 214 C. 1903 [2] 104).  
2) Di[4-Methoxyphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbon-säure. Sm. 172° (Ar. 241, 215 C. 1903 [2] 104).
- $C_{18}H_{20}O_5N_2S_2$  1) Monophenylhydrazon d. 1,3-Di[Acetonylsulfon]benzol. Sm. 152° u. Zers. (J. pr. [2] 68, 326 C. 1903 [2] 1171).
- $C_{18}H_{20}O_5N_2S_2$  1) 4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Na<sub>2</sub> (J. pr. [2] 66, 569 C. 1903 [1] 519).
- $C_{18}H_{21}O_4N_2P$  1) Di[4-Methylphenylamid] d. Phosphorsäuremonoäthylester. Sm. 108° (A. 326, 249 C. 1903 [1] 868).
- $C_{18}H_{22}O_4NBr$  2) Methylhydroxyd d. Brommorphin (A. 297, 212). — \*III, 669.
- $C_{18}H_{22}O_5N_2S$  1)  $\alpha$ -dl-[2-Naphtylsulfonamidoacetyl]amido- $\gamma$ -Methylvaleriansäure. Sm. 124,3–125° (B. 36, 2601 C. 1903 [2] 619).  
2)  $\alpha$ -l-[2-Naphtylsulfonamidoacetyl]amido- $\gamma$ -Methylvaleriansäure. Sm. 144–145° (B. 36, 2602 C. 1903 [2] 619).
- $C_{18}H_{23}ON_2J$  1) Hydrojod- $\delta$ -Cinnamylamin. Sm. 223° (A. 332, 223 C. 1904 [2] 203).
- $C_{18}H_{23}O_2NBr_2$  \*1) Methylhydroxyd d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 208°. Salze siehe (A. 334, 290 C. 1904 [2] 984).

- $C_{18}H_{20}O_2NBr_2$  2) Methylhydroxyd d. 2,6-Dibrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 188—189° (A. 334, 322 C. 1904 [2] 987).
- $C_{18}H_{20}O_2NS$  5) Benzylamid d.  $\beta$ -Phenylpentan- $\beta$ -Sulfonsäure. Sm. 62—64° (B. 36, 3690 C. 1903 [2] 1426).
- $C_{18}H_{24}O_3N_2S$  1) 4-Amido-4'-Sulfonmethylanido-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 170° (D.R.P. 148760 C. 1904 [1] 555).
- $C_{18}H_{24}O_4NBr$  \*2) Brommethylat d. 1-Scopolamin. Sm. 216—217° (D.R.P. 145996 C. 1903 [2] 1226).
- 3) Brommethylat d. 1-Cocain (D.R.P. 48273). — \*III, 645.
- $C_{18}H_{26}ON_3P$  1) Dipropylmonamid-Di[Phenylamid] d. Phosphorsäure. Sm. 220° (A. 326, 185 C. 1903 [1] 820).
- $C_{18}H_{26}O_3NBr$  1) Brommethylat d. Atropin. Sm. 222—223° (D.R.P. 145996 C. 1903 [2] 1225).
- 2) Brommethylat d. Hyoscyamin. Sm. 210—212° (D.R.P. 145996 C. 1903 [2] 1225).
- $C_{18}H_{26}N_5SP$  1) Diäthylmonamid-Di[4-Methylphenylamid] d. Thiophosphorsäure. Sm. 166—167° (A. 326, 212 C. 1903 [1] 822).
- 2) Dipropylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 145° (A. 326, 212 C. 1903 [1] 822).
- 3) Isobutylmonamid-Di[4-Methylphenylamid] d. Thiophosphorsäure. Sm. 152° (A. 326, 205 C. 1903 [1] 821).
- $C_{18}H_{27}O_{17}NS$  \*1) Chondroitinschwefelsäure (H. 37, 411 C. 1903 [1] 1146).
- $C_{18}H_{28}ON_5P$  1) Dipropylmonamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 164° (A. 326, 185 C. 1903 [1] 820).
- $C_{18}H_{28}O_2NJ$  1) Jodbenzylat d. d-2-Propylhexahydro-1-Pyridylelessigsäuremethylester. Sm. 103° (B. 37, 3637 C. 1904 [2] 1510).
- 2) isom. Jodbenzylat d. d-2-Propylhexahydro-1-Pyridylelessigsäuremethylester. Sm. 146° (B. 37, 3637 C. 1904 [2] 1510).
- $C_{18}H_{28}N_5SP$  1) Dipropylmonamid-Di[Phenylhydrazid] d. Thiophosphorsäure. Sm. 196° (A. 326, 213 C. 1903 [1] 822).
- $C_{18}H_{31}O_2N_2J$  1) Methylester d. Sparteiniodammoniumessigsäure. Sm. 230° (Ar. 242, 517 C. 1904 [2] 1412).
- $C_{18}H_{31}O_3NS$  1) Methylamid d.  $\alpha$ -Oxy- $\epsilon$ -Phenyl- $\beta$ - $\beta$ -Dimethylnonan- $\epsilon^2$ -Sulfonsäure. Sm. 81—82° (B. 37, 3267 C. 1904 [2] 1031).
- $C_{18}H_{42}ON_3P$  1) Tri[Dipropylamid] d. Phosphorsäure. Fl. (A. 326, 200 C. 1903 [1] 821).
- $C_{18}H_{42}O_6N_5P_3$  1) trim. Phosphinodipropylamin. Sd. 204°<sub>10</sub> (A. 326, 192 C. 1903 [1] 820).

- $C_{18}H_{14}O_3NCl_2P$  1) 2,4-Dichlorphenylmonamid d. Phosphorsäurediphenylester. Sm. 132° (A. 326, 229 C. 1903 [1] 867).
- $C_{18}H_{14}O_3NBr_2P$  1) 2,4-Dibromphenylmonamid d. Phosphorsäurediphenylester. Sm. 141° (A. 326, 236 C. 1903 [1] 867).
- $C_{18}H_{14}O_4N_2Cl_2S_2$  1) Di[Phenylchloramid] d. Benzol-1,3-Disulfonsäure. Sm. 124° (Soc. 85, 1187 C. 1904 [2] 1115).
- $C_{18}H_{15}O_3NBrP$  1) 4-Bromphenylmonamid d. Phosphorsäurediphenylester. Sm. 112° (A. 326, 232 C. 1903 [1] 867).
- $C_{18}H_{16}O_4N_2BrS_2$  1) Di[Phenylamid] d. 4-Brombenzol-1,2-Disulfonsäure. Sm. 182° (C. 1900 [2] 371). — \*II, 223.
- $C_{18}H_{16}ON_3Br_2P$  2) Di[Phenylamid]-2,4-Dibromphenylamid d. Phosphorsäure. Sm. 228° (A. 326, 236 C. 1903 [1] 867).
- $C_{18}H_{16}O_2N_2ClP$  1) Di[Phenylamid] d. Phosphorsäuremono-4-Chlorphenylester. Sm. 167—168° (A. 326, 249 C. 1903 [1] 868).
- $C_{18}H_{21}ONBr_3J$  1) Jodmethylat d. 2,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 172—173° u. Zers. (A. 334, 325 C. 1904 [2] 984).
- $C_{18}H_{22}ONClBr_2$  1) Chlormethylat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 225—226° (A. 334, 292 C. 1904 [2] 984).
- $C_{18}H_{22}ONBr_2J$  \*1) Jodmethylat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 174—175° (190—191°) (A. 334, 292 C. 1904 [2] 984).

- $C_{18}H_{22}ONBr_2J$  2) Jodmethylat d. 2,6-Dibrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 193—196° u. Zers. (A. 334, 321 C. 1904 [2] 987).

**C<sub>19</sub>-Gruppe.**

- $C_{19}H_{14}$  \*2) 9-Phenylfluoren. Sm. 145° (146—148°) (B. 37, 74 C. 1904 [1] 518; B. 37, 2897 C. 1904 [2] 1310).
- $C_{19}H_{16}$  \*1) Triphenylmethan (B. 36, 383 C. 1903 [1] 716; C. r. 137, 59 C. 1903 [2] 574; C. r. 138, 92 C. 1904 [1] 509; B. 37, 616 C. 1904 [1] 811).
- 4) 2-Benzylacenaphten. Sm. 112—113°; Sd. 340—345° (Bl. [3] 31, 375 C. 1904 [1] 1271; Bl. [3] 31, 924 C. 1904 [2] 778).
- $C_{19}H_{22}$  2)  $\alpha\alpha$ -Diphenyl- $\alpha$ -Hepten. Fl. (B. 37, 1454 C. 1904 [1] 1353).
- $C_{19}H_{24}$  \*1)  $\alpha\alpha$ -Diphenylheptan. Sd. 333—334° (B. 37, 1454 C. 1904 [1] 1353).
- $C_{19}H_{28}$  \*1) Kohlenwasserstoff (aus Cholesterylchlorid). Sd. 235—250°<sub>28</sub> (M. 24, 661 C. 1903 [2] 1236).
- $C_{19}H_{36}$  2) Kohlenwasserstoff (aus Petroleum) (C. 1904 [1] 409).

## — 19 II —

- $C_{19}H_{10}O_4$  C 75,5 — H 3,3 — O 21,2 — M. G. 302.
- 1) Methenylbisindandion. Sm. 303° (G. 32 [2] 330 C. 1903 [1] 586; G. 33 [1] 421 C. 1903 [2] 421).
- 2) Anhydrid d. 3-Benzoylnaphtalin-1,8-Dicarbonsäure. Sm. 196° (Bl. [3] 31, 379 C. 1904 [1] 1271; Bl. [3] 31, 924 C. 1904 [2] 778; Bl. [3] 31, 929 C. 1904 [2] 779).
- 3) Anhydrid d. 4-Benzoylnaphtalin-1,8-Dicarbonsäure. Sm. 195° (A. 327, 98 C. 1903 [1] 1228).
- $C_{19}H_{10}O_6$  C 71,7 — H 3,1 — O 25,2 — M. G. 318.
- 1) 1-Keto-2-[1,3-Diketo-2,3-Dihydro-2-Indenyl]inden-3-Carbonsäure. Sm. 242° (B. 35, 3959 C. 1903 [1] 32).
- $C_{19}H_{12}O_2$  3) 2-Phenyl-3,4- $\beta$ -Naphtopyron ( $\alpha$ -Phenyl- $\beta$ -Naphtocumarin). Sm. 142° (B. 36, 1971 C. 1903 [2] 377).
- $C_{19}H_{12}O_3$  3) Anhydrid d. 2-Benzylnaphtalin-4,5-Dicarbonsäure. Sm. 175° (Bl. [3] 31, 378 C. 1904 [1] 1271; Bl. [3] 31, 924 C. 1904 [2] 778).
- $C_{19}H_{12}O_5$  3) 2,3,7-Trioxy-9-Phenylfluoren. Sm. noch nicht bei 300°.  $H_2SO_4$  (B. 37, 1173 C. 1904 [1] 1161).
- $C_{19}H_{12}O_6$  2) Di[4-Oxy-1,2-Benzpyron-3-]methan (Methylenbis- $\beta$ -Oxycumarin). Sm. 260° u. Zers. (B. 36, 465 C. 1903 [1] 636).
- 3) 2,3,7-Trioxy-9-[2-Oxyphenyl]fluoren (B. 37, 2734 C. 1904 [2] 542).
- 4) 2,3,7-Trioxy-9-[4-Oxyphenyl]fluoren (B. 37, 2733 C. 1904 [2] 542).
- $C_{19}H_{12}O_7$  C 64,8 — H 3,4 — O 29,8 — M. G. 322.
- 1) 2,3,7-Trioxy-9-[3,4-Dioxyphenyl]fluoren. Sm. oberh. 300°.  $H_2SO_4$  +  $H_2O$  (B. 37, 2732 C. 1904 [2] 541).
- $C_{19}H_{12}O_8$  C 62,0 — H 3,2 — O 34,8 — M. G. 368.
- 1) Diacetat d. Rhein. Sm. 236° (240°) (C. 1903 [1] 297; Ar. 240, 611 C. 1903 [1] 176; C. 1904 [1] 1077).
- $C_{19}H_{12}Cl_4$  1)  $\alpha,4,4',4'$ -Tetrachlortriphenylmethan. Sm. 146—148° (B. 37, 1635 C. 1904 [1] 1649).
- $C_{19}H_{15}N$  \*3) 3-Phenyl- $\beta$ -Naphtochinolin. Sm. 189° (C. r. 139, 298 C. 1904 [2] 714).
- \*4) 5-Phenylakridin. Sm. 181—183°. Pikrat +  $\frac{1}{2}C_6H_6$  (B. 37, 3200 C. 1904 [2] 1472).
- 6)  $\alpha$ -Di-o-Benzylenpyridin. Sm. 205°. Pikrat (G. 33 [1] 426 C. 1903 [2] 951).
- $C_{19}H_{18}Cl_3$  1) Tri[4-Chlorphenyl]methan. Sm. 88° (C. 1903 [2] 1052).
- $C_{19}H_{14}O$  5) 9-Oxy-9-Phenylfluoren. Sm. 106° (B. 37, 73 C. 1904 [1] 518).
- 6) 4-Keto-1-Diphenylmethylen-1,4-Dihydrobenzol (Diphenylchinonmethan). Sm. 167—168° (B. 36, 2335 C. 1903 [2] 441; B. 36, 2792 C. 1903 [2] 882; B. 36, 3253 C. 1903 [2] 884).
- 7) 3-Benzoylacenaphten. Sm. 101° (99°). +  $AlCl_3$ , Pikrat (A. 327, 96 C. 1903 [1] 1228; Bl. [3] 31, 859 C. 1904 [2] 655).
- 8) 9-Phenylxanthen. Sm. 145° (B. 37, 2371 C. 1904 [2] 344).

- $C_{19}H_{14}O_2$  6) Diphenylmethylenäther d. 1,2-Dioxybenzol. Sm. 93° (*B.* 37, 3331 *C.* 1904 [2] 1050).  
 7) 3-Oxy-4-Keto-1-Diphenylmethylen-1,4-Dihydrobenzol (chin. 2-Oxy-fuchson). Sm. 123° (*B.* 37, 3330 *C.* 1904 [2] 1049).  
 8) 9-Oxy-9-Phenylxanthen. Sm. 158° (*B.* 37, 2370 *C.* 1904 [2] 344; *B.* 37, 2933 *C.* 1904 [2] 1142).
- $C_{19}H_{14}O_3$  \*4) Phenylester d. Diphenyläther-2-Carbonsäure. Sm. 109° (*C. r.* 136, 1075 *C.* 1903 [1] 1362; *C. r.* 139, 141 *C.* 1904 [2] 593).
- $C_{19}H_{14}O_4$  13) Dilakton d.  $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenyl- $\beta$ -Penten- $\gamma\delta$ -Dicarbonsäure (Diphenylheptendilakton). Sm. 161° (*A.* 331, 176 *C.* 1904 [1] 1212).  
 14) Isodiphenylheptendilakton. Sm. 234°. Ca, Ba, Ag<sub>2</sub> (*A.* 331, 181 *C.* 1904 [1] 1212).  
 15) Methylester d. 2-[1-Oxy-2-Naphtoyl]benzol-1-Carbonsäure. Sm. 108—109° (*B.* 36, 560 *C.* 1903 [1] 721).  
 16) 1-Methylester d. 2-Phenylnaphtalin-1,2<sup>2</sup>-Dicarbonsäure. Sm. 171,5° (*A.* 335, 117 *C.* 1904 [2] 1132).  
 17) 2<sup>2</sup>-Methylester d. 2-Phenylnaphtalin-1,2<sup>2</sup>-Dicarbonsäure. Sm. 124°. Ag (*A.* 334, 117 *C.* 1904 [2] 1132).
- $C_{19}H_{14}O_5$  \*2) Vulpinsäure (*C.* 1903 [2] 121).  
 8) 2,3,6,7-Tetraoxy-9-Phenylxanthen (*B.* 37, 1174 *C.* 1904 [1] 1161).
- $C_{19}H_{14}O_6$  \*13) Pinastrinsäure (*C.* 1903 [2] 121).  
 24) Trimethyläther d. Trioxybrasanchinon. Sm. 260° (*B.* 36, 2200 *C.* 1903 [2] 381).  
 25) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]butan-3,4-Methylenäther- $\beta$ -Ketocarbonsäure. Sm. 135° (*A.* 333, 258 *C.* 1904 [2] 1391).  
 26) isom. Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]butan-3,4-Methylenäther- $\beta$ -Ketocarbonsäure. Sm. 130° (*A.* 333, 258 *C.* 1904 [2] 1391).  
 27) Diacetat d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 195—196° (*B.* 37, 778 *C.* 1904 [1] 1156).  
 28) Diacetat d. 3,7-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 157° (*B.* 37, 1182 *C.* 1904 [1] 1275).  
 29) Diacetat d. 7,8-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 193° (*B.* 36, 4242 *C.* 1904 [1] 382).
- $C_{19}H_{14}O_7$  5) Diacetat d. isom. 1,2,3-Trioxo-9,10-Anthrachinonmonomethyläther. Sm. 184° (*M.* 23, 1017 *C.* 1903 [1] 291).
- $C_{19}H_{14}O_8$  \*1) Diacetat d. Rhein. Sm. 247—248° (*Ar.* 241, 605 *C.* 1904 [1] 169).  
 3) Diacetat d. Pigments  $C_{15}H_{10}O_6$ . Sm. 125° (*B.* 36, 3960 *C.* 1904 [1] 39).
- $C_{19}H_{14}Cl_2$  2)  $\alpha$ , 4'-Dichlortriphenylmethan. Sm. 87° (*B.* 37, 1633 *C.* 1904 [1] 1649).
- $C_{19}H_{14}Br_2$  2) 4,4'-Dibromtriphenylmethan. Sm. 100°; Sd. 260°<sub>15</sub> (*Am.* 30, 463 *C.* 1904 [1] 377).
- $C_{19}H_{16}N$  6) Inn. Anhydrid d.  $\alpha$ -Oxy-4-Amidotriphenylmethan. Sm. bei 300° u. Zers. (*B.* 36, 2794 *C.* 1903 [2] 883).  
 7) Verbindung (aus 2-Methylchinolin u. Zimmtaldehyd). Sm. 117° (*B.* 36, 4330 *C.* 1904 [1] 449).
- $C_{19}H_{16}N_3$  9) 4-Benzylidenamidoazobenzol. Sm. 127° (*A.* 329, 221 *C.* 1903 [2] 1428).  
 10) Nitril d.  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -[1-Naphtyl]amidoessigsäure. Sm. 97° (*D.R.P.* 153418 *C.* 1904 [2] 679).  
 11) Nitril d.  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -[2-Naphtyl]amidoessigsäure. Sm. 106° (*D.R.P.* 153418 *C.* 1904 [2] 679).  
 12) Nitril d.  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[1-Naphtyl]amidoessigsäure. Sm. 151° (*D.R.P.* 153418 *C.* 1904 [2] 679).  
 13) Nitril d.  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[2-Naphtyl]amidoessigsäure. Sm. 129° (*D.R.P.* 153418 *C.* 1904 [2] 679).
- $C_{19}H_{16}Cl$  \*1)  $\alpha$ -Chlortriphenylmethan. + Pyridin, + AlCl<sub>3</sub> (*Am.* 29, 129 *C.* 1903 [1] 714; *B.* 36, 384 *C.* 1903 [1] 716; *Am.* 29, 609 *C.* 1903 [2] 204; *R.* 22, 309 *C.* 1903 [2] 203; *B.* 36, 3925 *C.* 1904 [1] 95).
- $C_{19}H_{16}Br$  \*1)  $\alpha$ -Bromtriphenylmethan. + Br<sub>2</sub>, + J<sub>2</sub> (*B.* 37, 3543 *C.* 1904 [2] 1738).

- $C_{19}H_{16}O$  \*1)  $\alpha$ -Oxytriphenylmethan. Sm. 162° (160,5°). + Chinolin, + Phenylhydrazin (B. 35, 4007 C. 1903 [1] 30; B. 36, 406 C. 1903 [1] 585; B. 36, 1010 C. 1903 [1] 1077; B. 36, 1589 C. 1903 [2] 111; B. 36, 2337 C. 1903 [2] 441; B. 36, 3006 C. 1903 [2] 950; Bl. [3] 29, 1131 C. 1904 [1] 284; B. 37, 2107 C. 1904 [2] 107; B. 37, 2755 C. 1904 [2] 707).
- \*3)  $\epsilon$ -Keto- $\alpha\eta$ -Diphenyl- $\alpha\gamma\zeta$ -Heptatriën. (HCl, SbCl<sub>5</sub>), (HCl, SnCl<sub>4</sub>) (B. 37, 3671 C. 1904 [2] 1569).
- \*4) 2-Keto-1,3-Dibenzyliden-R-Pentamethylen. 2HBr (B. 37, 1653 C. 1904 [1] 1603).
- 7)  $\epsilon$ -Keto- $\alpha\eta$ -Diphenyl- $\alpha\gamma\zeta$ -Heptatriën (Benzalcinnamylidenacetone). Sm. 108° (C. 1904 [2] 507).
- $C_{19}H_{16}O_2$  \*5)  $\alpha$ ,4-Dioxytriphenylmethan +  $\frac{1}{2}H_2O$ . Sm. 143—144° (165° wasserfrei). + C<sub>6</sub>H<sub>6</sub> (B. 36, 2337 C. 1903 [2] 441; B. 36, 2791 C. 1903 [2] 882; B. 36, 3247 C. 1903 [2] 884; B. 36, 3571 C. 1903 [2] 1375).
- 6) Acetat d. 2-Oxy-1-Benzyl-naphtalin. Sm. 40° (G. 33 [2] 490 C. 1904 [1] 656).
- 7) Acetat d. 4-Oxy-1-Benzyl-naphtalin. Sm. 87—88° (G. 33 [2] 473 C. 1904 [1] 654).
- 8) Verbindung (aus d. Verb. C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>). Sm. 144,5° (Soc. 83, 304 C. 1903 [1] 879).
- 9) Verbindung (aus 2-Keto-1,4,5-Trioxo-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen). Sm. 175° (Soc. 83, 303 C. 1903 [1] 878).
- $C_{19}H_{16}O_3$  \*2)  $\alpha$ ,4,4'-Trioxotriphenylmethan (Benzaurin) (B. 36, 2791 C. 1903 [2] 882).
- 15)  $\alpha$ ,3,4-Trioxotriphenylmethan (B. 37, 3329 C. 1904 [2] 1049).
- 16) 2-Keto-1,3-Di[2-Oxybenzyliden]-R-Pentamethylen. Sm. 190° u. Zers. (B. 36, 1502 C. 1903 [1] 1351).
- 17) 2-Keto-1,3-Di[4-Oxybenzyliden]-R-Pentamethylen. Sm. oberh. 300° (B. 36, 1503 C. 1903 [1] 1352).
- 18) Methylenäther d.  $\epsilon$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]- $\epsilon$ -[4-Methylphenyl]- $\alpha\gamma$ -Pentadiën. Sm. 122° (B. 37, 1700 C. 1904 [1] 1497).
- 19) Acetat d. Verb. C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>. Sm. 145° (B. 36, 1494 C. 1903 [1] 1350).
- $C_{19}H_{16}O_4$  13) Trimethyläther d. Trioxo- $\beta\beta$ -Phenylennaphtylenoxyd (Tr. d. Trioxybrasan). Sm. 244—246° (B. 36, 2199 C. 1903 [2] 381).
- 14) Anhydrid d.  $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\gamma\delta$ -Oxyd- $\beta\delta$ -Dicarbonsäure. Sm. 158° (Soc. 83, 307 C. 1903 [1] 879).
- 15) Lakton d.  $\beta$ -Oxy- $\delta$ -Keto- $\alpha\gamma$ -Diphenylpentan- $\gamma$ -Carbonsäure. Sm. 91° (A. 333, 231 C. 1904 [2] 1389).
- 16) Dilakton d.  $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenylpentan- $\beta\gamma$ -Dicarbonsäure (Diphenylheptodilakton). Sm. 149° (A. 331, 187 C. 1904 [1] 1212).
- $C_{19}H_{16}O_5$  12) Trimethyläther d. Tetraoxy- $\beta\beta$ -Phenylennaphtylenoxyd (Tr. d. Tetraoxybrasan). Sm. 220° (B. 36, 2199 C. 1903 [2] 381).
- 13) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]butan-4-Methyläther- $\beta$ -Ketocarbonsäure. Sm. 116° (A. 333, 269 C. 1904 [2] 1392).
- 14) Monolakton d.  $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenyl- $\beta$ -Penten- $\gamma\delta$ -Dicarbonsäure. Ba + H<sub>2</sub>O, Ag (A. 331, 178 C. 1904 [1] 1212).
- 15) Acetat d. 1,7-Dioxy-2,6-Dimethyl-9,10-Anthrachinonmonomethyläther. Sm. 195—196° (Soc. 83, 1332 C. 1904 [1] 100).
- 16) 4,6-Diacetat d. 3,4,6-Trioxo-phenanthren-3-Methyläther. Sm. 162 bis 163° (B. 36, 3081 C. 1903 [2] 1320; B. 37, 3501 C. 1904 [2] 1320).
- 17) 3-Acetat d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron-6-Aethyläther. Sm. 133—134° (B. 37, 777 C. 1904 [1] 1156).
- 18) isom. Diacetat d. Chrysarobin. Sm. 193° (Soc. 81, 1579 C. 1903 [1] 34, 167).
- $C_{19}H_{16}O_6$  \*4) Diphenacylmalonsäure. + CHCl<sub>3</sub> (C. 1904 [1] 1259).
- 11) 4-Acetoxy-1,3,6-Dimethoxyphenanthren-9-Carbonsäure. Sm. 201 bis 203° (B. 35, 4409 C. 1903 [1] 343).
- 12)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Acetoxy- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]-propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 116—117° (A. 333, 261 C. 1904 [2] 1391).
- 13) 3-Acetat d. 3,6-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron-2',6-Dimethyläther. Sm. 121—122° (B. 37, 2349 C. 1904 [2] 230).

- $C_{19}H_{16}O_6$  14) 3-Acetat d. 3,6-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron-2<sup>3</sup>, 6-Dimethyläther. Sm. 134° (B. 37, 960 C. 1904 [1] 1160).  
 15) 3-Acetat d. 3,6-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron-2<sup>4</sup>, 6-Dimethyläther. Sm. 131—132° (B. 37, 783 C. 1904 [1] 1159).  
 16) 3-Acetat d. 3,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron-2<sup>3</sup>, 7-Dimethyläther. Sm. 138—139° (B. 37, 4158 C. 1904 [2] 1658).  
 17) 3-Acetat d. 3,7-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron-2<sup>3</sup>, 7-Dimethyläther. Sm. 165° (B. 37, 4160 C. 1904 [2] 1658).  
 18) 3-Acetat d. 3,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron-2<sup>4</sup>, 7-Dimethyläther. Sm. 193—194° (B. 37, 4162 C. 1904 [2] 1659).  
 19) 3-Acetat d. 3,5,7-Trioxo-2-Phenyl-1,4-Benzpyron-5,7-Dimethyläther. Sm. 192—193° (B. 37, 2804 C. 1904 [2] 712).  
 20) 3-Acetat d. 3,7,8-Trioxo-2-Phenyl-1,4-Benzpyron-7,8-Dimethyläther. Sm. 185° (B. 37, 2808 C. 1904 [2] 713).  
 21) Triacetat d. Verb.  $C_{13}H_{10}O_8$ . Sm. oberh. 300° (B. 37, 1179 C. 1904 [1] 1162).  
 22) Triacetat d. Verb.  $C_{13}H_{10}O_8$ . Sm. noch nicht bei 300° (B. 37, 2737 C. 1904 [2] 542).  
 23) isom. Triacetat d. Verb.  $C_{13}H_{10}O_8$ . Sm. 270—275° (B. 37, 2737 C. 1904 [2] 542).
- $C_{19}H_{16}O_7$  \*2) Diäthylester d. 2,4,9-Triketo-2,3,4,9-Tetrahydro- $\beta\beta$ -Naphtinden-1,3-Dicarbonensäure. Sm. 159°. Ba (E. Hoyer, Dissert., Berlin 1901).
- $C_{19}H_{16}O_8$  3) Carbousninsäure. Sm. 195—196° (J. pr. [2] 68, 4 C. 1903 [2] 510).
- $C_{19}H_{16}O_9$  \*3) Tetraacetat d. Purpurogallin. Sm. 184—186° (Soc. 85, 246 C. 1904 [1] 798, 1005).
- $C_{19}H_{16}N_2$  \*2) Diphenylbenzenylamidin. Sm. 145° (Ann. 31, 583 C. 1904 [2] 109).  
 11) Anhydrid d.  $\alpha$ -Oxy-4,4'-Diamidotriphenylmethan. Sm. oberh. 250° (B. 37, 2865 C. 1904 [2] 776).  
 12) 4-Imido-1-[4-Amidodiphenyl]methylen-1,4-Dihydrobenzol(p-Amidofuchsonimin). HCl, Pikrat (B. 37, 2863 C. 1904 [2] 776).  
 13) 4-[4-Methylphenyl]azobenzol. Sm. 137° (C. 1904 [1] 1491).
- $C_{19}H_{16}N_6$  \*2) Formazylazobenzol (B. 36, 55 C. 1903 [1] 450).
- $C_{19}H_{17}N$  12)  $\alpha$ -Phenylamido- $\alpha$ -Diphenylmethan. Fl. HCl (B. 37, 2693 C. 1904 [2] 519).  
 13) 2-Amidotriphenylmethan. Sm. 128—130°. +  $C_6H_6$  (Sm. 94—95°) (B. 37, 3198 C. 1904 [2] 1472).  
 14) 2,6-Di[4-Methylphenyl]pyridin. Sm. 162°. (HCl,  $AuCl_3$ ), Pikrat (B. 36, 852 C. 1903 [1] 976).
- $C_{19}H_{17}N_3$  \*2)  $\alpha$ -Phenylimido- $\alpha$ -[ $\alpha$ -Phenylhydrazido]- $\alpha$ -Phenylmethan. Sm. 119° (Ann. 31, 582 C. 1904 [2] 109).  
 \*3)  $\alpha$ -Phenylimido- $\alpha$ -[ $\beta$ -Phenylhydrazido]- $\alpha$ -Phenylmethan. Sm. 174 bis 175° (Ann. 31, 583 C. 1904 [2] 109).  
 18) Anhydrid d.  $\alpha$ -Oxytri[4-Amidophenyl]methan (B. 36, 4025 C. 1904 [1] 167).
- $C_{19}H_{17}N_6$  8) 5-Amido-1,2-Di[4-Amidophenyl]benzimidazol. Sm. 223—224° (B. 37, 1071 C. 1904 [1] 1273).
- $C_{19}H_{18}O$  3)  $\epsilon$ -Keto- $\alpha\epsilon$ -Di[4-Methylphenyl]- $\alpha\gamma$ -Pentadien. Sm. 123—124° (B. 36, 852 C. 1903 [1] 976).  
 4) 2-Keto-1,3-Dimethyl-4,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 122° (Soc. 83, 303 C. 1903 [1] 878).
- $C_{19}H_{18}O_2$  8) Säure (aus 2-Keto-1,4,5-Trioxo-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen). Sm. 215—216°. Ag (Soc. 83, 301 C. 1903 [1] 879).  
 9) Laktone d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]propen- $\gamma$ -Carbonsäure. Sm. 124° (B. 36, 921 C. 1903 [1] 1031; A. 333, 245 C. 1904 [2] 1391).
- $C_{19}H_{18}O_3$  \*10) Dianisalacetone. Sm. 126,5—127°. + HCl, + 2HCl, + HBr, + 1(2) $H_2SO_4$ , +  $H_3PO_4$ , + Chloressigsäure (C. 1903 [2] 284; B. 36, 1481 C. 1903 [1] 1349; B. 36, 131 C. 1903 [1] 457).  
 12) Trimethyläther d. 2-Trioxäthenylphenanthren. Sm. 122,5°. Pikrat (B. 37, 2789 C. 1904 [2] 716).  
 13)  $\gamma$ -Benzoylmethyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 125° (C. 1903 [2] 944).  
 14) Laktone d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]propan- $\gamma$ -Carbonsäure. Sm. 186° (B. 36, 920 C. 1903 [1] 1031; A. 333, 238 C. 1904 [2] 1390).

- $C_{19}H_{18}O_3$  15) isom. Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]-propan- $\gamma$ -Carbonsäure. Sm. 198° (B. 36, 920 C. 1903 [1] 1031; A. 333, 251 C. 1904 [2] 1391).
- $C_{19}H_{18}O_4$  16) Verbindung (aus 2-Keto-1,4,5-Triox-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen). Sm. 89–90° (Soc. 83, 304 C. 1903 [1] 879).
- \*13) Aethylester d.  $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 69–72° (A. 331, 316 C. 1904 [2] 46).
- 26) Diäthyläther d. 5,6-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran. Sm. 115° (B. 29, 1889). — \*III, 532.
- 27)  $\epsilon$ -Keto- $\gamma\delta$ -Diphenylhexan- $\gamma\delta$ -Oxyd- $\beta$ -Carbonsäure. Na, Ag (Soc. 83, 295 C. 1903 [1] 878).
- 28) Lakton d.  $\beta$ -Oxy- $\delta$ -Acetoxy- $\alpha\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. Sm. 142° (A. 333, 279 C. 1904 [2] 1393).
- $C_{19}H_{18}O_5$  \*10)  $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpentan- $\delta\epsilon$ -Dicarbonsäure. Na<sub>2</sub> (A. 326, 362 C. 1903 [1] 1124).
- 16) Methyläther d. Ononetin. Sm. 95–110° (M. 24, 149 C. 1903 [1] 1033).
- 17)  $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\gamma\delta$ -Oxyd- $\beta\delta$ -Dicarbonsäure. Sm. 171° (184°). Ag<sub>2</sub> (Soc. 83, 306 C. 1903 [1] 879).
- 18)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Acetoxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 117° (A. 333, 271 C. 1904 [2] 1392).
- 19) Monolakton d.  $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenylpentan- $\beta\gamma$ -Dicarbonsäure. Sm. noch nicht bei 160°. Ba, Ag (A. 331, 189 C. 1904 [1] 1212).
- 20)  $\gamma^2$ -Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3-Oxyphenyl]propen- $\alpha^2, \gamma^4$ -Dimethyläther. Sm. 70–71° (B. 37, 4159 C. 1904 [2] 1658).
- 21) 2-Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxphenyl]- $\alpha$ -Phenylpropen-3,4-Dimethyläther. Sm. 110° (B. 36, 4239 C. 1904 [1] 381).
- 22) Diacetat d. 1,3-Dioxy-2,4-Dimethylxanthen. Sm. 117–118° (M. 25, 327 C. 1904 [1] 1495).
- 23) Verbindung (aus d. Verb.  $C_{27}H_{20}O_{12}$ ). Sm. 180–181° (M. 24, 211 C. 1903 [2] 38).
- $C_{19}H_{18}O_6$  \*11)  $\alpha$ -Trimethyläther d. Brasilon (B. 36, 1221 C. 1903 [1] 1183).
- \*14)  $\beta$ -Trimethyläther d. Brasilon (B. 36, 1220 C. 1903 [1] 1183).
- 17) 2<sup>3</sup>,2<sup>4</sup>-Dimethyläther-7-Aethyläther d. 3,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 193–194° (B. 37, 789 C. 1904 [1] 1157).
- 18)  $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenyl- $\beta$ -Penten- $\gamma\delta$ -Dicarbonsäure. Ca, Ba, Ag<sub>2</sub> (A. 331, 179 C. 1904 [1] 1212).
- 19)  $\beta$ -Acetat- $\alpha\gamma$ -Dibenzoat d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 248–251°<sub>22</sub> (C. 1903 [1] 134).
- 20) Verbindung (aus Brasilon- $\beta$ -Trimethyläther). Sm. 174–175° (B. 37, 631 C. 1904 [1] 955; M. 25, 880 C. 1904 [2] 1312).
- $C_{19}H_{18}O_7$  6) 2<sup>3</sup>,2<sup>4</sup>,5,7-Tetramethyläther d. 3,5,7-Triox-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 197–198° (B. 37, 1404 C. 1904 [1] 1356).
- $C_{19}H_{18}O_8$  3) Pentamethyläther d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm. 192–194° (C. 1904 [2] 709).
- $C_{19}H_{18}O_9$  \*3) Leprarin (Leprariasäure). Sm. 155° (J. pr. [2] 68, 69 C. 1903 [2] 514).
- $C_{19}H_{18}N_2$  \*2) 4,4'-Diamidotriphenylmethan (B. 37, 2860 C. 1904 [2] 776).
- 10) 4-[4-Methylphenyl]- $\alpha$ -Diphenylhydrazin. Sm. 102° (C. 1904 [1] 1491).
- $C_{19}H_{19}N$  4) 4-[4-Isopropylbenzyl]isochinolin. Sm. 72,5–73,5°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), Pikrat (A. 326, 301 C. 1903 [1] 929).
- $C_{19}H_{20}O_8$  9)  $\gamma$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]propen- $\gamma$ -Carbonsäure. Sm. 136° (B. 36, 921 C. 1903 [1] 1031; A. 333, 246 C. 1904 [2] 1391).
- 10)  $\beta$ -[4-Isopropylbenzoyl]- $\beta$ -Phenylpropionsäure. Sm. 111° (B. 36, 921 C. 1903 [1] 1031; A. 333, 246 C. 1904 [2] 1391).
- 11)  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\gamma$ -[4-Isopropylphenyl]buttersäure. Sm. 169° (B. 36, 920 C. 1903 [1] 1031; A. 333, 242 C. 1904 [2] 1390).
- 12) Aethylester d. Säure  $C_{17}H_{16}O_8$ . Sm. 48–50° (B. 37, 2247 C. 1904 [2] 328).
- $C_{19}H_{20}O_4$  21) 2-Keto-1,4,5-Triox-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen. Sm. 89° (Soc. 83, 295 C. 1903 [1] 878).
- 22) Dibenzylester d. Propan- $\alpha\gamma$ -Dicarbonsäure. Sd. 248°<sub>14</sub> (B. 35, 4084 C. 1903 [1] 75).
- 23) Diacetat d.  $\beta\beta$ -Di[4-Oxyphenyl]propan. Sm. 78° (C. 1904 [2] 1737).
- 24) Verbindung (aus Trimethylolbisacetophenon). Sm. 103° (B. 36, 1354 C. 1903 [1] 1299).

- $C_{10}H_{20}O_6$  11) 2<sup>3</sup>, 2<sup>4</sup>-Dimethyläther-7-Aethyläther d. 7-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 110° (B. 37, 788 C. 1904 [1] 1157).
- $C_{10}H_{20}O_6$  12) Anhydrolariciresinol. Sm. 207° (M. 23, 1026 C. 1903 [1] 288).
- 9)  $\alpha^2, \alpha^4, \gamma^3, \gamma^4$ -Tetramethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphe-  
nyl]- $\alpha$ -[2,4-Dioxyphenyl]propen. Sm. 152° (B. 37, 794 C. 1904 [1] 1159).
- 10)  $\alpha^3, \alpha^4, \gamma^3, \gamma^4$ -Tetramethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphe-  
nyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 157° (B. 37, 793 C. 1904 [1] 1158).
- 11) Tetramethyläther d. 5,7-Dioxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-  
1,4-Benzpyron. Sm. 159—160° (B. 37, 1403 C. 1904 [1] 1355).
- 12)  $\alpha$ s-Dioxy- $\alpha$ s-Diphenylpentan- $\beta$  $\gamma$ -Dicarbonsäure. Ca, Ag<sub>2</sub> (A. 331,  
189 C. 1904 [1] 1213).
- 13) Verbindung (aus d. Verb.  $C_{10}H_{18}O_6$ ) (M. 25, 881 C. 1904 [2] 1312).
- $C_{10}H_{20}O_7$  \*3) Barbatinsäure (Rhizonsäure). Na + 2H<sub>2</sub>O (J. pr. [2] 68, 12 C. 1903  
[2] 510; A. 327, 340 C. 1903 [2] 509).
- $C_{10}H_{20}O_8$  3) Anhydrodiaacetylpi-kro-  
tin. Sm. oberh. 300° (B. 31, 2973). — \*III, 472.
- 4) Benzoat d. Arbutin. Sm. 184,5° (D.R.P. 151036 C. 1904 [1] 1308).
- $C_{10}H_{20}N_2$  6) s-[2-Methylphenyl]imido- $\alpha$ -[2-Methylphenyl]amido- $\alpha$  $\gamma$ -Pentadien.  
Fl. HCl, HBr (J. pr. [2] 69, 136 C. 1904 [1] 816; J. pr. [2] 70, 42  
C. 1904 [2] 1235; A. 333, 324 C. 1904 [2] 1149).
- 7) s-[3-Methylphenyl]imido- $\alpha$ -[3-Methylphenyl]amido- $\alpha$  $\gamma$ -Pentadien.  
HBr (J. pr. [2] 70, 45 C. 1904 [2] 1235).
- 8) s-[4-Methylphenyl]imido- $\alpha$ -[4-Methylphenyl]amido- $\alpha$  $\gamma$ -Pentadien.  
Sm. 121°. HCl, HBr (A. 333, 323 C. 1904 [2] 1149; J. pr. [2] 70, 46  
C. 1904 [2] 1236).
- $C_{10}H_{20}N_4$  3) 2,6-Di[Phenylamido]-4-Methyl-5-Aethyl-1,3-Diazin. HCl (B. 36,  
1922 C. 1903 [2] 209).
- $C_{10}H_{21}Br$  1)  $\beta$ -Brom- $\alpha$  $\alpha$ -Diphenyl- $\alpha$ -Hepten. Sm. 74° (B. 37, 1454 C. 1904 [1] 1353).
- $C_{10}H_{22}O_8$  5) Isoamylester d.  $\alpha$ -Oxydiphenylelessigsäure. Sd. 230—232°<sub>28</sub> (B. 37,  
2767 C. 1904 [2] 708).
- $C_{10}H_{22}O_4$  2)  $\alpha$  $\gamma$ -Dioxy- $\beta$ -Phenyl- $\gamma$ -[4-Isopropylphenyl]buttersäure. Ag (A. 333,  
243 C. 1904 [2] 1390).
- 3) Methylster d. O-Benzoylcampocarbonsäure. Sm. 58,5—59,5°  
(B. 36, 4273 C. 1904 [1] 457).
- $C_{10}H_{22}O_5$  6) Tri[Methylol]bisacetophenon. Sm. 156° (B. 36, 1352 C. 1903 [1] 1299).
- $C_{10}H_{22}O_6$  \*2) Lariciresinol (M. 23, 1022 C. 1903 [1] 287).
- \*3) isom. Lariciresinol. Sm. 104° (M. 23, 1023 C. 1903 [1] 288).
- 6) Tetramethyläther d. Acakatechin. Sm. 152—153° (C. 1904 [2] 439).
- $C_{10}H_{22}O_{10}$  3) Pentaacetat d. 2,4,6-Trioxo-5-Dioxy-methyl-1,3-Dimethylbenzol.  
Sm. 152—153° (M. 24, 879 C. 1904 [1] 369).
- $C_{10}H_{22}O_{11}$  C 53,5 — H 5,1 — O 41,3 — M. G. 426.
- 1) Saponarin (oder  $C_{21}H_{24}O_{12}$ ). Sm. 231° u. Zers. (C. 1904 [2] 1503).
- $C_{10}H_{24}O$  C 85,1 — H 8,9 — O 6,0 — M. G. 268.
- 1)  $\alpha$ -Oxy- $\alpha$ -Diphenylheptan. Sd. 200—201°<sub>11</sub> (B. 37, 1454 C. 1904 [1]  
1353).
- $C_{10}H_{24}O_2$  5)  $\alpha$  $\alpha$ -Di[4-Oxyphenyl]heptan. Sm. 103° (C. 1904 [1] 1650).
- 6) Bornylester d. Zimmtsäure. Sm. 33° (C. r. 136, 238 C. 1903 [1] 584).
- $C_{10}H_{24}O_6$  \*3)  $\beta_1$ -Benzylidenbisacetessigsäureäthylester. Sm. 154° (B. 36, 2186  
C. 1903 [2] 569; Soc. 83, 1297 C. 1904 [1] 95).
- \*5) isom. Benzylidenbisacetessigsäureäthylester (Soc. 83, 1298 C. 1904  
[1] 95).
- $C_{10}H_{26}N_8$  \*1) 4-[4-Diäthylamidobenzyliden]amido-1-Dimethylamidobenzol. Sm.  
136° (B. 37, 860 C. 1904 [1] 1206).
- $C_{10}H_{26}O$  C 84,4 — H 9,6 — O 5,9 — M. G. 270.
- 1) Kristallalban. Sm. 227,5—228° (Ar. 241, 485 C. 1903 [2] 1178).
- $C_{10}H_{26}O_8$  \*4) 1-Menthylester d.  $\beta$ -Oxy- $\alpha$ -Phenylakrylsäure. Na, Cu (Soc. 81, 1496  
C. 1903 [1] 153).
- \*5) 1-Menthylester d. Formylphenylelessigsäure (Soc. 81, 1494 C. 1903  
[1] 153).
- $C_{10}H_{28}O_5$  C 68,3 — H 7,8 — O 23,9 — M. G. 334.
- 1) Diäthylester d. Dehydrodioxyparasantonsäure (C. 1903 [2] 1447).
- $C_{10}H_{28}O_2$  \*2) Abietinsäure (Ar. 241, 523 C. 1903 [2] 1179; Soc. 85, 1238 C. 1904  
[2] 107, 1308).
- 8)  $\alpha$ -Abietinsäure. Sm. 143—155°. Ag (Ar. 241, 507 C. 1903 [2] 1179).
- 9)  $\beta$ -Abietinsäure. Sm. 145—158°. Ag (Ar. 241, 508 C. 1903 [2] 1179).

- $C_{19}H_{26}O_2$  10)  $\gamma$ -Abietinsäure. Sm. 153—154°. Ag (Ar. 241, 512 C. 1903 [2] 1179).  
 $C_{19}H_{26}O_3$  4) Aethylester d. 1-Aethyläthersantonigen Säure. Sm. 31—32° (G. 25, [1] 517). — \*II, 978.  
 $C_{19}H_{26}O_4$  5)  $\alpha$ -Palmitat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 65° (C. 1903 [1] 133).  
 $C_{19}H_{26}O_8$  2) Verbindung (aus Formaldehyd u. Acetylaceton). Sm. 167° (B. 36, 2178 C. 1903 [2] 372).  
 $C_{19}H_{30}O_9$  C 56,7 — H 7,4 — O 35,8 — M. G. 402.  
 1) Tetraäthylester d.  $\delta$ -Ketoheptan- $\alpha\gamma\eta$ -Tetracarbonsäure. Sd. 220 bis 230°<sub>19</sub> (B. 37, 3816 C. 1904 [2] 1606).  
 $C_{19}H_{30}O_{10}$  6) Pentaäthylester d. Butan- $\alpha\alpha\beta\beta$ -Pentacarbonsäure. Sd. 215—218°<sub>17</sub> (C. 1903 [1] 628; Soc. 85, 611 C. 1904 [1] 1254, 1553).  
 $C_{19}H_{32}O$  C 82,6 — H 11,6 — O 5,8 — M. G. 276.  
 1) Spongosterin. Sm. 119—120° (H. 41, 112 C. 1904 [1] 996).  
 $C_{19}H_{32}O_4$  \*1) Lichesterinsäure. Sm. 124,5° (Ar. 241, 1 C. 1903 [1] 697).  
 2) Protolichesterinsäure. Sm. 104—105° (A. 324, 39 C. 1902 [2] 904; A. 327, 353 C. 1903 [2] 510).  
 $C_{19}H_{32}O_6$  3) Methylester d. Proto- $\alpha$ -Lichesterinsäure. Sm. 33° (J. pr. [2] 68, 31 C. 1903 [2] 511).  
 $C_{19}H_{34}O_2$  2) Methylester d. Chaulmoograsäure. Sm. 22°; Sd. 227°<sub>20</sub> (Soc. 85, 853 C. 1904 [2] 348, 604).  
 $C_{19}H_{36}O_2$  5) Methylester d. Dihydrochaulmoograsäure. Sm. 26—27°; Sd. 222 bis 223°<sub>20</sub> (Soc. 85, 853 C. 1904 [2] 348, 604).  
 $C_{19}H_{36}O_3$  C 73,1 — H 11,5 — O 15,4 — M. G. 312.  
 1) Methylester d. Ricinolsäure. Sd. 245°<sub>10</sub> (B. 36, 783 C. 1903 [1] 823).  
 $C_{19}H_{38}O_2$  \*2) Methylester d. Stearinsäure. Sm. 38° (B. 37, 3659 C. 1904 [2] 1452).  
 \*4) Aethylester d. Margarinsäure. Sm. 28° (Soc. 85, 837 C. 1904 [2] 509).  
 $C_{19}H_{38}O_4$  \*3)  $\alpha$ -Palmitat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 72° (B. 36, 4342 C. 1904 [1] 434).  
 $C_{19}H_{38}N_4$  \*1) Anhydrid d. 2,3-Dihydro-2,3-Diketo-2,3-Dihydro-2-Indenyl-1,4-Naphtochinon d.  $\alpha$ -Keto- $\beta$ -Methyl- $\beta$ -Oktadeken. Sm. 306° (G. 33, 330 C. 1903 [2] 655).

## — 19 III —

- $C_{19}H_4O_7Br_{12}$  1) Verbindung (aus 3,4,5,6-Tetrabrom-1,2-Benzochinon). Sm. 192—193° (Am. 31, 96 C. 1904 [1] 802).  
 $C_{19}H_6O_5Br_6$  1) Monobenzoat d. Hexabrom-o-Oxybrenzkatechinäther. Sm. 316 bis 318° (Am. 30, 524 C. 1904 [1] 366).  
 $C_{19}H_8O_4Br_2$  1) 3-Brom-2-[2-Brom-1,3-Diketo-2,3-Dihydro-2-Indenyl]-1,4-Naphtochinon. Sm. 225° (B. 35, 3964 C. 1903 [1] 33).  
 $C_{19}H_8O_5Br_3$  1)  $\alpha$ -Verbindung (aus Benzylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon). Zers. bei 165—170° (Am. 31, 101 C. 1904 [1] 802).  
 2)  $\beta$ -Verbindung (aus Benzylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon). Sm. 216—217° (Am. 31, 101 C. 1904 [1] 802).  
 $C_{19}H_9O_2N$  C 80,6 — H 3,2 — O 11,3 — N 4,9 — M. G. 283.  
 1)  $\alpha$ -Diphenylpyridindiketon. Sm. 256° (G. 32 [2] 331 C. 1903 [1] 33).  
 $C_{19}H_9O_3N$  C 76,2 — H 3,0 — O 16,1 — N 4,7 — M. G. 290.  
 1) Anhydrid d. Methenylbisindandionmonoxim. Sm. 303° u. Zers. (G. 33 [2] 156 C. 1903 [2] 1272).  
 $C_{19}H_9O_4Br$  \*1) 3-Brom-2-[1,3-Diketo-2,3-Dihydro-2-Indenyl]-1,4-Naphtochinon. NH<sub>2</sub>, Na (B. 35, 3957 C. 1903 [1] 32).  
 $C_{19}H_9O_5Br$  1) 1-Keto-2-[2-Brom-1,3-Diketo-2,3-Dihydro-2-Indenyl]inden-3-Carbonsäure. Sm. 234° (B. 35, 3960 C. 1903 [1] 32).  
 $C_{19}H_9O_5Br_5$  1) Pentabromformononetin. Sm. 325° (M. 25, 578 C. 1904 [2] 907).  
 $C_{19}H_{10}O_{12}N_6$  C 44,4 — H 1,9 — O 37,3 — N 16,3 — M. G. 514.  
 1) Tri[2,4-Dinitrophenyl]methan. Sm. 260° u. Zers. HNO<sub>3</sub> (B. 36, 2779 C. 1903 [2] 880).  
 $C_{19}H_{11}O_2N_3$  C 73,1 — H 3,2 — O 10,3 — N 13,4 — M. G. 312.  
 1) Dioxim d.  $\alpha$ -Diphenylpyridindiketon (G. 33 [1] 425 C. 1903 [2] 951).  
 $C_{19}H_{11}O_3N$  2) Imid d. 2-Benzoylnaphtalin-1,8-Dicarbonsäure. Sm. 252° (Bl. [3] 31, 380 C. 1904 [1] 1271).  
 $C_{19}H_{11}O_3N_3$  2) Anhydrid d. Methenylbisindandiontrioxim. Sm. 312° u. Zers. (G. 33 [2] 158 C. 1903 [2] 1273).  
 $C_{19}H_{11}O_4N$  2) Anhydrid d. 2-[ $\alpha$ -Oximidobenzyl]naphtalin-4,5-Dicarbonsäure. Sm. 242° u. Zers. (Bl. [3] 31, 380 C. 1904 [1] 1271).

- $C_{19}H_{12}ON_2$  2) 2,2'-Dichinolyketon. Sm. 230—240° (B. 37, 1239 C. 1904 [1] 1362).  
 $C_{19}H_{12}OBr_2$  1) 3,5-Dibrom-4-Keto-1-Diphenylmethylen-1,4-Dihydrobenzol. Sm. 232° (225°) (B. 34, 3078; B. 36, 3237 C. 1903 [2] 883).  
 $C_{19}H_{12}O_2N_4$  C 69,5 — H 3,6 — O 9,8 — N 17,1 — M. G. 328.  
 $C_{19}H_{12}O_8N_2$  1) Homofluorindin-2-Carbonsäure (B. 36, 4033 C. 1904 [1] 294).  
 7) 6-[2-Oxy-1-Naphtylazo]-1,2-Benzpyron. Sm. 222° (Soc. 85, 1234 C. 1904 [2] 1124).  
 $C_{19}H_{12}O_6Cl_2$  2) Diacetat d. 5,6-Dioxy-2-Keto-1-[p-Dichlorbenzyliden]-1,2-Dihydrobenzofuran. Sm. 189—191° u. Zers. (B. 29, 2434). — \*III, 532  
 $C_{19}H_{12}O_6Br_6$  1) Triacetat d. 2,3,5,2',3',5'-Hexabrom- $\alpha$ ,4,4'-Trioxydiphenylmethan. Sm. 204° (A. 330, 76 C. 1904 [1] 1148).  
 $C_{19}H_{18}ON$  7) 5-[2-Oxyphenyl]akridin. Sm. 289—290° u. Zers. (Bl. [3] 31, 1085 C. 1904 [2] 1508).  
 8) 5-[4-Oxyphenyl]akridin. Sm. 355—356° u. Zers. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (Bl. [3] 31, 1091 C. 1904 [2] 1509).  
 $C_{19}H_{18}OCl$  1) 9-Phenylxanthoniumchlorid. + FeCl<sub>3</sub>, + HgCl<sub>2</sub> (B. 37, 2935 C. 1904 [2] 1142).  
 $C_{19}H_{18}OBr_3$  1)  $\alpha$ ,3,5-Tribrom-4-Oxytriphenylmethan. Sm. 130—133° (B. 36, 3243 C. 1903 [2] 884).  
 2) 9-Phenylxanthoniumtribromid. Sm. 168—170° u. Zers. (B. 37, 2936 C. 1904 [2] 1142).  
 $C_{19}H_{18}O_2N$  6) o-Methylchinophthalon. Sm. 276,5—277° (279°) (B. 36, 3017 C. 1904 [1] 97; B. 37, 3017 C. 1904 [2] 1409).  
 7) p-Methylchinophthalon. Sm. 233° (B. 37, 3017 C. 1904 [2] 1409).  
 8) o-Methylisochinophthalon. Sm. 235° (B. 37, 3017 C. 1904 [2] 1409).  
 9) p-Methylisochinophthalon. Sm. 237° (B. 37, 3017 C. 1904 [2] 1409).  
 10)  $\alpha$ -Di-o-Benzylenolpyridin. Sm. 270—275° (G. 33 [1] 425 C. 1903 [2] 951).  
 11) Imid d. 2-Benzylnaphtalin-4,5-Dicarbonsäure. Sm. 227° (Bl. [3] 31, 378 C. 1904 [1] 1271; Bl. [3] 31, 924 C. 1904 [2] 778).  
 $C_{19}H_{18}O_2N_3$  8) p-Phenylazo-5-Oxy-1-Phenylbenzoxazol. Sm. 184° (B. 35, 4202 C. 1903 [1] 146).  
 $C_{19}H_{18}O_8N$  3) Naphtostyrylphenylessigsäure. Sm. 186—187° (B. 35, 4222 C. 1903 [1] 166).  
 $C_{19}H_{18}O_6N$  C 68,0 — H 3,9 — O 23,9 — N 4,2 — M. G. 335.  
 1) 1-[ $\alpha$ -Oximidobenzyl]naphtalin-4,5-Dicarbonsäure. Sm. 199° (A. 327, 98 C. 1903 [1] 1228).  
 $C_{19}H_{18}O_7N_3$  \*1)  $\alpha$ -Oxytri[4-Nitrophenyl]methan. Sm. 188—189° (u. 167°). +  $\frac{1}{2}C_6H_6$  (C. 1904 [1] 461; B. 37, 3355 C. 1904 [1] 1649; B. 37, 3355 C. 1904 [2] 1126).  
 $C_{19}H_{18}O_6N$  2) Diacetat d. 5,6-Dioxy-2-Keto-1-[3-Nitrobenzyliden]-1,2-Dihydrobenzofuran. Sm. 218—219° (B. 29, 2434). — \*III, 532.  
 3) Diacetat d. 5,6-Dioxy-2-Keto-1-[4-Nitrobenzyliden]-1,2-Dihydrobenzofuran. Sm. 219° (B. 37, 823 C. 1904 [1] 1151).  
 $C_{19}H_{18}ClS$  1) 9-Phenylthioxanthoniumchlorid. + FeCl<sub>3</sub> (B. 37, 2937 C. 1904 [2] 1143).  
 $C_{19}H_{18}Br_3S$  1) 9-Phenylthioxanthoniumtribromid. Sm. 180° (B. 37, 2938 C. 1904 [2] 1143).  
 $C_{19}H_{14}OS$  1) 9-Oxy-9-Phenylthioxanthen. Sm. 105—106° (B. 37, 2937 C. 1904 [2] 1142).  
 $C_{19}H_{14}O_2N_2$  12) Benzoat d. 3-Oxyazobenzol. Sm. 91,5—92° (B. 36, 4104 C. 1904 [1] 271).  
 $C_{19}H_{14}O_2Br_2$  1) 3,5-Dibrom- $\alpha$ ,4-Dioxytriphenylcarbinol. Sm. 138° (B. 36, 3242 C. 1903 [2] 884).  
 $C_{19}H_{14}O_2S_2$  1) Diphenyläther d. 3,6-Dimerkapto-2-Methyl-1,4-Benzochinon. Sm. 141—142° (A. 336, 160 C. 1904 [2] 1300).  
 $C_{19}H_{14}O_5N_4$  2) Phenylamid d. 5-Nitroazobenzol-2-Carbonsäure. Sm. 180,5° (B. 35, 2717 C. 1902 [1] 638; B. 36, 4375 C. 1904 [1] 446).  
 $C_{19}H_{14}O_5S$  4) Sulton d.  $\alpha$ -Oxytriphenylmethan-2-Sulfonsäure. Sm. 210° (B. 37, 3267 C. 1904 [2] 1031).  
 $C_{19}H_{14}O_4Br_2$  1) Dilakton d.  $\gamma\delta$ -Dibrom- $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenylpentan- $\beta\gamma$ -Dicarbonsäure. Sm. 192° (A. 331, 185 C. 1904 [1] 1212).  
 $C_{19}H_{14}O_5N_2$  2) 2-Keto-1,3-Di[3-Nitrobenzyliden]-R-Pentamethylen. Sm. 209° (B. 36, 1504 C. 1903 [1] 1352).

- $C_{19}H_{14}O_5N_2$  3) 2-Keto-1,3-Di[4-Nitrobenzyliden]-R-Pentamethylen. Sm. 240° u. Zers. (B. 36, 1504 C. 1903 [1] 1352).  
 $C_{19}H_{14}O_5S$  \*2) Diphenylester d. Benzol-1-Carbonsäure-2-Sulfonsäure (Am. 30, 297 C. 1903 [2] 1121).  
 $C_{19}H_{14}O_6Cl_4$  1) 4,4'-Diacetat d.  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha$ - $\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]-äthan- $\alpha$ -Methyläther. Sm. 128—130° (A. 325, 59 C. 1903 [1] 462).  
 $C_{19}H_{14}ClBr$  1)  $\alpha$ -Chlor-4-Bromtriphenylmethan. Sm. 111° (B. 37, 1633 C. 1904 [1] 1649).  
 $C_{19}H_{14}ClI$  1)  $\alpha$ -Chlor-4-Jodtriphenylmethan. Sm. 119° (B. 37, 1633 C. 1904 [1] 1649).  
 $C_{19}H_{15}ON$  14) 3-[ $\alpha$ -Oximidobenzyl]acenaphten. Sm. 185° (175°) (A. 327, 97 C. 1903 [1] 1228; Bl. [3] 31, 861 C. 1904 [2] 653).  
 $C_{19}H_{15}ON_3$  \*4) isom. 5-Benzoylamido-2-Methyl- $\alpha$ -oder- $\beta$ -Naphtimidazol. Sm. 280° u. Zers. (Soc. 77, 1165; Soc. 83, 1199 C. 1903 [2] 1445).  
 6) Phenylamid d. Azobenzol-2-Carbonsäure. Sm. 113° (B. 36, 4376 C. 1904 [1] 446).  
 $C_{19}H_{15}O_2N_3$  20) 4-Phenylamidoazobenzol-4'-Carbonsäure. Sm. 221—222° (D.R.P. 146950 C. 1903 [2] 1402; D.R.P. 150469 C. 1904 [1] 1115).  
 21) Benzoat d. 4-Oxy-1-Phenylamidodiazobenzol. Sm. 132,5° (B. 36, 4145 C. 1904 [1] 186).  
 $C_{19}H_{15}O_3N$  \*2)  $\alpha$ -Oxy-4-Nitrotriphenylmethan. Sm. 97—98° (B. 37, 606 C. 1904 [1] 887).  
 $C_{19}H_{15}O_4N$  11)  $\alpha$ -Phenyl- $\alpha$ -[1-Naphtyl]amidoessigsäure-3-Carbonsäure. Na<sub>2</sub> (B. 35, 4222 C. 1903 [1] 166).  
 12) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Benzoxyl- $\beta$ -Phenylakrylsäure. Sm. 78 bis 79° (C. r. 136, 691 C. 1903 [1] 920; Bl. [3] 31, 336 C. 1904 [1] 1135).  
 $C_{19}H_{15}O_4Br$  2) Dilakton d.  $\gamma$ - oder - $\delta$ -Brom- $\alpha$ -Dioxy- $\alpha$ -Diphenylpentan- $\beta$ - $\gamma$ -Dicarbonsäure. Sm. 186° (A. 331, 186 C. 1904 [1] 1212).  
 $C_{19}H_{15}O_5N$  3) Oxim d. Dipiperonalaceton? Sm. 159—161° (G. 29 [2] 418). — \*III, 192.  
 $C_{19}H_{15}O_6N_5$  C 55,8 — H 3,7 — O 23,4 — N 17,1 — M. G. 409.  
 1) 2,4,6-Trinitro-3,5-Di[Phenylamido]-1-Methylbenzol. Sm. 206° (R. 23, 128 C. 1904 [2] 201).  
 $C_{19}H_{15}N_2Cl$  4)  $\alpha$ -Chlor- $\alpha$ -Phenylimido- $\alpha$ -Diphenylamidomethan. Sm. 90—92° (B. 37, 964 C. 1904 [1] 1002).  
 $C_{19}H_{15}N_4Cl$  2)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylazo- $\alpha$ -[2-Chlorphenyl]methan. Sm. 190° (C. 1903 [2] 427).  
 $C_{19}H_{16}ON_2$  19)  $\alpha$ -Benzoyl- $\alpha$ - $\beta$ -Diphenylhydrazin. Sm. 138—139° (C. r. 136, 1553 C. 1903 [2] 359; B. 36, 139 C. 1903 [1] 507).  
 20) isom.  $\alpha$ -Benzoyl- $\alpha$ - $\beta$ -Diphenylhydrazin. Sm. 126° (C. r. 136, 1554 C. 1903 [2] 359).  
 $C_{19}H_{16}ON_4$  16)  $\alpha$ -Phenylazo- $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Oxyphenyl]methan. Sm. 164 bis 165° (C. 1903 [2] 426).  
 17) 6-Oxy-3-Phenylazo-1-Phenylhydrazonmethylbenzol (C. 1903 [2] 427).  
 18) 6-Acetyl-3-Methyl-1,4-Diphenylbipyrazol. Sm. 174° (B. 36, 527 C. 1903 [1] 642).  
 $C_{19}H_{16}OCl_4$  1) 1,3-Dichlor-2-Keto-1,3-Di[ $\alpha$ -Chlorbenzyl]-R-Pentamethylen. Sm. 185° u. Zers. (B. 36, 1500 C. 1903 [1] 1351).  
 $C_{19}H_{16}O_2N_4$  12) 3,5-Dioxy-P-Diphenylazo-1-Methylbenzol. Sm. 229—230° u. Zers. (A. 329, 304 C. 1904 [1] 793).  
 13)  $\alpha$ -[1-Phenyl-2,3-Dimethylpyrazolon-[5]-yl-[4]-imid d. Isatin. Sm. 269° u. Zers. Pikrat (B. 36, 4132 C. 1904 [1] 463).  
 $C_{19}H_{16}O_3S_2$  1) 3,6-Diphenyläther d. 3,6-Dimerkapto-2,5-Dioxy-1-Methylbenzol. Sm. 78—80° (A. 336, 161 C. 1904 [2] 1300).  
 $C_{19}H_{16}O_3N_4$  2) 2,4,6-Trioxo-3,5-Diphenylazo-1-Methylbenzol. Sm. 238° (A. 329, 283 C. 1904 [1] 796).  
 $C_{19}H_{16}O_4N_4$  4) 2,4-Dinitro-3,5-Di[Phenylamido]-1-Methylbenzol. Sm. 162° (R. 23, 126 C. 1904 [2] 200).  
 $C_{19}H_{16}O_4S$  1) 4-Oxytriphenylmethan- $\alpha$ -Sulfonsäure. Na + 3½ H<sub>2</sub>O (B. 36, 2793 C. 1903 [2] 883).  
 $C_{19}H_{16}O_5N_2$  3) 1-Acetyl-3-Keto-5-[4-Acetylamidophenyl]-2,3-Dihydroindol-2-Carbonsäure? Sm. 292° (C. 1903 [1] 35).

- $C_{10}H_{16}O_6N_4$  C 60,0 — H 4,2 — O 21,1 — N 14,7 — M. G. 380.  
 1) Methyläther d. 2,6-Dinitro-3,5-Di[Phenylamido]-1-Oxybenzol. Sm. 234° (B. 23, 117 C. 1904 [2] 205).
- $C_{10}H_{16}O_6N_2$  3)  $\alpha$ -Aethylester d. 2-Carboxyphenylazobenzoylbrenztraubensäure. Sm. 158—160° u. Zers. (B. 37, 2208 C. 1904 [2] 324).
- $C_{10}H_{16}O_6N_6$  C 53,8 — H 3,8 — O 22,6 — N 19,8 — M. G. 424.  
 1) Tri[2-Nitro-4-Amidophenyl]methan. Sm. noch nicht bei 300° (B. 36, 2781 C. 1903 [2] 880).
- $C_{10}H_{16}O_6Br_2$  3) Tetramethyläther d. 6,8-Dibrom-5,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 261—262° (B. 37, 2626 C. 1904 [2] 538).
- $C_{10}H_{16}O_{11}S_2$  1) Dipiperonylidencetonbischydrosulfonsäure.  $K_2 + 2\frac{1}{2}H_2O$ , Ba (B. 37, 4055 C. 1904 [2] 1649).
- $C_{10}H_{18}NCl$  1)  $\alpha$ -Chlor-2-Amidotriphenylmethan. HCl (B. 37, 3195 C. 1904 [2] 1471).  
 2)  $\alpha$ -Chlor-4-Amidotriphenylmethan. HCl (B. 37, 601 C. 1904 [1] 886).
- $C_{10}H_{17}ON$  \*2)  $\alpha$ -Oxy-4-Amidotriphenylmethan. HCl (B. 37, 599 C. 1904 [1] 886).  
 12)  $\alpha$ -Oxy-2-Amidotriphenylmethan. Sm. 121,5°. 2HCl +  $H_2O$ , Pikrat (B. 37, 3192 C. 1904 [2] 1471).  
 13) 4-Dimethylamidophenyl-1-Naphtylketon. Sm. 115° (D. R. P. 42853). — \*III, 194.  
 14) 4-Dimethylamidophenyl-2-Naphtylketon. Sm. 127° (D. R. P. 42853). — \*III, 195.  
 15) Triphenylmethylhydroxylamin. Sm. 124—135° (B. 37, 3152 C. 1904 [2] 1047).
- $C_{10}H_{17}ON_3$  \*1)  $\beta$ -Diphenylamido- $\alpha$ -Phenylharnstoff. Sm. 206—207° (B. 36, 3157 C. 1903 [2] 1057).  
 4) Methyläther d. 2-Oxy-1-Diphenylamidodiazobenzol. Sm. 30—32° (C. r. 139, 571 C. 1904 [2] 1497).  
 5) Methyläther d. 4-Oxy-1-Diphenylamidodiazobenzol. Fl. (C. r. 139, 571 C. 1904 [2] 1497).
- $C_{10}H_{17}O_3N$  16) 2-Oxy-1-[ $\alpha$ -Acetylamidobenzyl]naphtalin. Sm. 236—237° (G. 33 [1] 5 C. 1903 [1] 925).  
 17) 4-Oxy-1-[4-Acetylamidobenzyl]naphtalin. Sm. 124—126° (M. 23, 983 C. 1903 [1] 288).
- $C_{10}H_{17}O_2N_3$  14) Phenylamid d. 4-Aethoxyl-1-Naphtylazoameisensäure. Sm. 238° (A. 334, 198 C. 1904 [2] 835).
- $C_{10}H_{17}O_3N$  12) Apoprotopapaverin (J. pr. [2] 68, 200 C. 1903 [2] 839).  
 13) Anhydrohydrastininumaron. Sm. 68—70°. (2HCl, PtCl<sub>4</sub>) (B. 37, 2743 C. 1904 [2] 544).
- $C_{10}H_{17}O_6N_3$  4) 4-Acetylamido-5-Phenyl-3-[4-Acetylamidophenyl]isoxazol. Sm. oberh. 250° (A. 328, 227 C. 1903 [2] 998).
- $C_{10}H_{17}O_4N$  \*3) Aethylester d. 4,5-Diketo-1,2-Diphenyltetrahydropyrrol-3-Carbonsäure. Sm. 173° (C. r. 139, 211 C. 1904 [2] 656).  
 6) 2-Benzoeat d. 2-Oximido-1,1-Dioxy-1,2-Dihydronaphtalin-1,1-Dimethyläther. Sm. 109—110° (B. 36, 4171 C. 1904 [1] 287).  
 7) 2-Keto-5,6-Dioxy-1-[4-Dimethylamidocinnamyliden]-1,2-Dihydrobenzofuran. Sm. 262° (B. 37, 826 C. 1904 [1] 1152).
- $C_{10}H_{17}O_6N_8$  C 62,1 — H 4,6 — O 21,8 — N 11,4 — M. G. 367.  
 1) Aethylester d.  $\delta$ -Phenylazo- $\gamma$ -Keto- $\alpha$ -[4-Nitrophenyl]- $\alpha$ -Buten- $\delta$ -Carbonsäure. Zers. oberh. 100°. Na (B. 36, 1450 C. 1903 [1] 1345).  
 2) Aethylester d. 6-Keto-2-Phenyl-4-[3-Nitrophenyl]-3,4,5,6-Tetrahydro-1,3-Diazin-5-Carbonsäure. Sm. 181—182° (Soc. 83, 723 C. 1903 [2] 55).
- $C_{10}H_{17}O_6N_3$  2) Aethylester d.  $\beta$ -Cyan- $\alpha\gamma$ -Di[4-Nitrophenyl]propan- $\beta$ -Carbonsäure. Sm. 164—165° (G. 32 [2] 358 C. 1903 [1] 629).
- $C_{10}H_{17}O_6Br$  1) Bromtrimethylbrasilon. Zers. bei 225° (B. 36, 399 C. 1903 [1] 587). — \*III, 480.
- $C_{10}H_{17}O_6Br_3$  1) Tetramethyläther d. 3,6,8-Tribrom-5,7-Dioxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 200° u. Zers. (B. 37, 2626 C. 1904 [2] 538).
- $C_{10}H_{17}O_8N$  2)  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Nitro-3-Acetoxy-4-Methoxyphenyl]-akrylsäure. Sm. 215° (B. 35, 4407 C. 1903 [1] 342).
- $C_{10}H_{17}N_3S$  4) 4-Methylphenyläther d. 4'-Merkaptodiazamidobenzol. Sm. 85° (J. pr. [2] 68, 275 C. 1903 [2] 994).

- $C_{19}H_{18}ON_2$  \*2)  $\alpha$ -Oxy-4,4'-Diamidotriphenylmethan. Sm. 173—175° (B. 37, 28 C. 1904 [2] 776).
- 17) 4'-Phenylamido-4-Oxy-3-Methyldiphenylamin (D.R.P. 1501 C. 1904 [1] 1467).
- 18) 2-Keto-1,3-Di[4-Amidobenzyliden]-R-Pentamethylen (B. 36, 18 C. 1903 [1] 1352).
- $C_{19}H_{18}O_2N_4$  C 68,2 — H 5,4 — O 9,6 — N 16,8 — M. G. 334.
- 1) Aethylester d.  $\alpha$ -Cyan- $\alpha$ -Imido- $\gamma$ -Phenylhydrazonbutan- $\beta$ -Carbonsäure. Sm. 163° (A. 332, 153 C. 1904 [2] 192).
- $C_{19}H_{18}O_2S_2$  1) Verbindung (aus Mercaptobenzol u. 2-Methyl-1,4-Benzochinon). Sm. 95—97° (A. 336, 159 C. 1904 [2] 1300).
- $C_{19}H_{18}O_3N_2$  8) 3-Keto-4-Aethyl-2,6-Diphenyl-2,3,4,5-Tetrahydro-1,2-Diazin-5-Carbonsäure? Sm. 134° (C. 1904 [1] 1259).
- 9) Aethylester d. 6-Keto-2,4-Diphenyl-3,4,5,6-Tetrahydro-1,2-Diazin-5-Carbonsäure. Sm. 188° (Soc. 83, 376 C. 1903 [1] 845, 114).
- $C_{19}H_{18}O_3Br_4$  2) Dimethyläther d.  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Keto- $\alpha\epsilon$ -Di[4-Oxyphenyl]pentan. Sm. 157—159° u. Zers. (B. 36, 1475 C. 1903 [1] 1348).
- $C_{19}H_{18}O_5N_2$  2) 1,1-Dimethyläther-2-[4-Nitrobenzyl]äther d. 2-Oximido-1,1-Dioxy-1,2-Dihydronaphthalin. Sm. 97—98° (B. 36, 4170 C. 1904 [1] 287).
- $C_{19}H_{18}O_5N_4$  C 59,7 — H 4,7 — O 20,9 — N 14,7 — M. G. 382.
- 1) Aethyläther d.  $\beta$ -Cyan- $\beta$ -Imidooxymethyl- $\alpha\gamma$ -Di[4-Nitrophenyl]propan. Sm. 169—170° (G. 32 [2] 363 C. 1903 [1] 629).
- $C_{19}H_{18}O_5Br_2$  2) 2-Acetat d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -2,3,4-Trioxyphenyl- $\alpha$ -Phenylpropan-3,4-Dimethyläther. Sm. 140° (B. 36, 4239 C. 1904 [1] 38).
- $C_{19}H_{18}O_6Br_2$  1)  $\alpha$ -Benzozat d. 6-Brom-2,3,4,5-Tetraoxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3,4-Methylenäther-2,5-Dimethyläther. Sm. 117—118° (C. 1903 [1] 970).
- $C_{19}H_{18}O_6S$  1) Sulfonsäure (aus Dibenzalaceton). Na + 3H<sub>2</sub>O, K + 4H<sub>2</sub>O (B. 36, 1491 C. 1903 [1] 1350).
- $C_{19}H_{18}O_8N_2$  C 56,7 — H 4,5 — O 31,8 — N 6,9 — M. G. 402.
- 1) Methylen-di[Phenylamidoessigsäurecarbonsäure]. Sm. 206—207° u. Zers. (C. 1903 [2] 835).
- 2) Diacetat d.  $\beta\beta$ -Di[ $\beta$ -Nitro-4-Oxyphenyl]propan. Sm. 150° (C. 1904 [2] 1737).
- $C_{19}H_{18}NBr_3$  \*1) 2,5,8-Tribrom-1,3,4,6,7,9-Hexamethylakridin? Sm. 287° (Soc. 83, 1202 C. 1904 [2] 1060).
- $C_{19}H_{19}ON$  7) 4-Aethylamidophenyl-[2-Oxy-1-Naphtyl]methan. Sm. 99—100° (HCl, N<sub>2</sub>SO<sub>4</sub> (M. 23, 999 C. 1903 [1] 290).
- 8) 4-Aethylamido-[4-Oxy-1-Naphtyl]methan. Sm. 169°. H<sub>2</sub>SO<sub>4</sub> (M. 23, 998 C. 1903 [1] 290).
- 9)  $\epsilon$ -Oximido- $\alpha\epsilon$ -Di[4-Methylphenyl]- $\alpha\gamma$ -Pentadien. Sm. 178° (B. 36, 852 C. 1903 [1] 976).
- $C_{19}H_{19}ON_3$  \*1)  $\alpha$ -Oxytri[4-Amidophenyl]methan. (HCl, HgCl<sub>2</sub>), HBr + 3H<sub>2</sub>O, HF, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 3H<sub>2</sub>O (C. 1904 [1] 460; B. 37, 3031 C. 1904 [1] 1010).
- 2) 3-Benzoylimido-1,4,5-Trimethyl-2-Phenyl-2,3-Dihdropyrazol-1-yl + H<sub>2</sub>O. Sm. 146° wasserfrei (B. 36, 3288 C. 1903 [2] 1191).
- $C_{19}H_{19}O_2N$  11)  $\gamma$ -Keto- $\beta$ -Benzoyl- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha$ -Buten. Sm. 18—19° (B. 37, 1744 C. 1904 [1] 1599).
- 12) 4-Aethylamidophenyl-[2,7-Dioxy-1-Naphtyl]methan. Sm. 153—154° (M. 23, 1001 C. 1903 [1] 290).
- 13) 1-Amylamido-9,10-Anthrachinon. Sm. 90° (D.R.P. 144634 C. 1904 [2] 750).
- $C_{19}H_{19}O_3N$  \*1) Galipidin. Sm. 113° (182°?) (C. 1903 [2] 1010).
- \*2) Acetyl pomorphin (B. 35, 4386 C. 1903 [1] 339).
- 5) Anhydrohydrastininacetophenon. Sm. 74° (2HCl, PtCl<sub>4</sub>) (B. 36, 215 C. 1904 [1] 591).
- 6) Phenylmonamid d.  $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure- $\gamma$ -Methylcarbonsäure. Sm. 142° (B. 36, 2339 C. 1903 [2] 438).
- $C_{19}H_{19}O_3N_3$  2) Verbindung (aus Dicyanbenzoylessigsäureäthylester). Sm. 155° (A. 332, 151 C. 1904 [2] 192).
- $C_{19}H_{19}O_3Br$  1) Hydrobromid d. Dianisalaceton. Sm. 165° u. Zers. (B. 36, 359 C. 1903 [2] 1369).

- $C_{10}H_{19}O_4N$  \*1) Bulbocapnin (*Soc.* 83, 625 *C.* 1903 [1] 1364).  
 9) Trimethyläther d. Papaverolin (Protopapaverin). Zers. bei 240° (260°). Na, HCl + 5H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HBr + 5H<sub>2</sub>O, HJ + 3H<sub>2</sub>O, Oxalat + 5H<sub>2</sub>O, Pikrat, + HgCl<sub>2</sub> (*C.* 1903 [1] 844; *J. pr.* [2] 68, 199 *C.* 1903 [2] 838).  
 10)  $\epsilon$ -Oximido- $\gamma\delta$ -Diphenylhexan- $\gamma\delta$ -Oxyd- $\beta$ -Carbonsäure. Sm. 172 bis 173° u. Zers. Ag (*Soc.* 83, 295 *C.* 1903 [1] 878).
- $C_{10}H_{19}O_4N_3$  4)  $\delta$ -Semicarbazon- $\beta\gamma$ -Diphenylpentan- $\beta\gamma$ -Oxyd- $\alpha$ -Carbonsäure. Sm. 198° u. Zers. (*Soc.* 83, 291 *C.* 1903 [1] 877).  
 5) Di[Methylphenylamid] d. Acetoximidomalonsäure. Sm. 130° (*Soc.* 83, 42 *C.* 1903 [1] 442).  
 6) isom. Di[Methylphenylamid] d. Acetoximidomalonsäure. Sm. 223° (*Soc.* 83, 43 *C.* 1903 [1] 442).
- $C_{10}H_{19}O_5Br$  1) Trimethyläther d. Brombrasilin, Sm. 181—184° (*B.* 21, 3014; 27, 525; 36, 398). — III, 653; \*III, 479.
- $C_{10}H_{19}O_6N$  3) 2',2'-Dimethyläther-7-Aethyläther d. 3-Oximido-7-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 175—176° (*B.* 37, 788 *C.* 1904 [1] 1157).  
 4) Oxim d.  $\beta$ -Trimethylbrasilon. Sm. 203—205° (*B.* 36, 398 *C.* 1903 [1] 587). — \*III, 480.  
 5) Verbindung (aus Cotarnin u. Protokatechualdehyd). HCl + H<sub>2</sub>O (*B.* 37, 1964 *C.* 1904 [2] 44).
- $C_{10}H_{19}O_6N_3$  3) Lakton d.  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -[6-Nitro-3,4-Dimethoxyphenyl]butan-2-Carbonsäure (Phenylhydrazon d. Acetonilnitromekonin). Sm. 184° (*B.* 36, 2209 *C.* 1903 [2] 443).
- $C_{10}H_{19}O_7N$  4) 2',2',4',5',7-Tetramethyläther d. 3-Oximido-5,7-Dioxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 183° u. Zers. (*B.* 37, 1404 *C.* 1904 [1] 1355).
- $C_{10}H_{19}O_9N$  \*1) Nitrooxydihydrotrimethylbrasilon. Sm. 222—225° (*B.* 35, 4285 *C.* 1903 [1] 291; *B.* 36, 2321 *C.* 1903 [2] 443).
- $C_{10}H_{19}N_4J$  1) Jodmethylat d. 3,6-Dimethyl-1,4-Diphenylbipyrazol. Sm. 205° (*B.* 36, 529 *C.* 1903 [1] 642).
- $C_{10}H_{20}ON_2$  10) 5-Acetyl-6-Methyl-2,4-Diphenyl-1,2,3,4-Tetrahydro-1,3-Diazin. Sm. 147° (*Soc.* 85, 459 *C.* 1904 [1] 1080, 1438).  
 11) Benzyläther d. 3,3-Dimethyl-2- $[\alpha$ -Oximidoäthyl]pseudoindol. Sm. 77—78° (*G.* 32 [2] 430 *C.* 1903 [1] 838).  
 12) Dehydrocinchonidin. Sm. 194°. HCl + 2H<sub>2</sub>O, Oxalat + H<sub>2</sub>O (*J. pr.* [2] 69, 205 *C.* 1904 [1] 1448).
- $C_{10}H_{20}O_2N_2$  13) Dimethyläther d.  $\epsilon$ -[2-Oxyphenyl]imido- $\alpha$ -[2-Oxyphenyl]amido- $\alpha\gamma$ -Pentadien. HBr (*J. pr.* [2] 70, 47 *C.* 1904 [2] 1236).  
 14) Dimethyläther d.  $\epsilon$ -[4-Oxyphenyl]imido- $\alpha$ -[4-Oxyphenyl]amido- $\alpha\gamma$ -Pentadien. HBr (*J. pr.* [2] 70, 48 *C.* 1904 [2] 1236).  
 15) 1,2-Dibenzoyl-3,5-Dimethyltetrahydropyrazol. Sm. 204,5° (*B.* 36, 223 *C.* 1903 [1] 522).
- $C_{10}H_{20}O_3N_4$  3) Benzylidenhydrazid d.  $\alpha$ -Benzoylamidoacetylamidopropionsäure. Sm. 216° (*J. pr.* [2] 70, 119 *C.* 1904 [2] 1037).  
 4) Benzylidenhydrazid d.  $\alpha$ -Benzoylamidopropionylamidoessigsäure. Sm. 224° (*J. pr.* [2] 70, 154 *C.* 1904 [2] 1395).
- $C_{10}H_{20}O_3Cl_2$  1) Dianisalacetondihydrochlorid. Sm. 123° (*B.* 36, 1474 *C.* 1903 [1] 1348).
- $C_{10}H_{20}O_3Br_2$  1) Dihydrobromid d. Dianisalacetone (*B.* 36, 3543 *C.* 1903 [2] 1369).  
 2)  $\beta\gamma$ -Dibrom- $\alpha$ -Oxy- $\beta$ -Phenyl- $\gamma$ -[4-Isopropylphenyl]buttersäure. Zers. bei 166—173° (*A.* 333, 247 *C.* 1904 [2] 1391).
- $C_{10}H_{20}O_3S$  1)  $\gamma$ -[4-Methylphenyl]sulfon- $\epsilon$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Hexen. Sm. 125—126° (*Am.* 31, 183 *C.* 1904 [1] 877).
- $C_{10}H_{20}O_4N_2$  7)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenyl- $\beta$ -Aethylpropan- $\gamma\gamma$ -Dicarbonsäure. Sm. 162° u. Zers. Diphenylhydrazinsalz (*C.* 1904 [1] 1258).
- $C_{10}H_{20}O_6N_2$  6) Diacetylderivat d. Verb.  $C_{10}H_{18}O_6N_2$ . Sm. 211—212° (*J. pr.* [2] 70, 373 *C.* 1904 [2] 1566).
- $C_{10}H_{20}O_6N_2$  3) Diäthylester d.  $\alpha$ -Phtalylamido- $\delta$ -Cyanbutan- $\alpha\alpha$ -Dicarbonsäure. Sm. 91° (*C.* 1903 [2] 33).
- $C_{10}H_{20}O_7S_2$  1) Cinnamylidenbenzylidenacetonebischydrosulfonsäure. K<sub>2</sub> + 3H<sub>2</sub>O (*B.* 37, 4053 *C.* 1904 [2] 1649).

- $C_{19}H_{20}O_5N_4$  C 52,8 — H 4,6 — O 29,6 — N 13,0 — M. G. 432.  
 1) Di[*p*-Nitro-4-Methoxyphenylamid] d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 202° (*G.* 34 [2] 266 *C.* 1904 [2] 1453).
- $C_{19}H_{20}O_6N_2$  C 54,3 — H 4,8 — O 34,3 — N 6,6 — M. G. 420.  
 1) Oxim d. Nitrotrimethylbrasilon. Sm. 159—162° (*B.* 36, 2321 *C.* 1903 [2] 443).
- $C_{19}H_{21}ON$  3) d-1-[ $\beta$ -Phenylisobutyryl]amido-2,3-Dihydroinden. Sm. 148—149° (*Soc.* 85, 449 *C.* 1904 [1] 1445).  
 4) dl-1-[ $\beta$ -Phenylisobutyryl]amido-2,3-Dihydroinden. Sm. 110—111° (*Soc.* 85, 444 *C.* 1904 [1] 954, 1445).  
 5) isom. dl-1-[ $\beta$ -Phenylisobutyryl]amido-2,3-Dihydroinden. Sm. 119,5° (*Soc.* 85, 445 *C.* 1904 [1] 954, 1445).  
 6) 1-Naphtylamid d.  $\alpha$ -Oktin- $\alpha$ -Carbonsäure. Sm. 99—100° (*C. r.* 136, 554 *C.* 1903 [1] 825).
- $C_{19}H_{21}O_2N$  4)  $\alpha$ -[3-Methylphenyl]amido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 99 bis 100° (*Soc.* 85, 1174 *C.* 1904 [2] 1215).  
 5)  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 96° (*Soc.* 85, 1174 *C.* 1904 [2] 1215).  
 6) 3-Methyläther-4-Aethyläther d. 3,5-Dimethyl-2-[3,4-Dioxyphenyl]-indol. Sm. 174° (*B.* 37, 874 *C.* 1904 [1] 1154).  
 7) Dimethylapomorphin. +  $C_2H_6O$  (*B.* 35, 4388 *C.* 1903 [1] 339).
- $C_{19}H_{21}O_2N_3$  3)  $\beta$ -Semicarbazon- $\gamma\delta$ -Diphenylhexan- $\gamma\delta$ -Oxyd. Sm. 204° (*Soc.* 83, 297 *C.* 1903 [1] 878).
- $C_{19}H_{21}O_3N$  \*6) Methyläther d. Thebenin. HCl,  $H_2SO_4$  (*B.* 36, 3082 *C.* 1903 [2] 955; *B.* 37, 2785 *C.* 1904 [2] 716).  
 \*7) Äthylester d.  $\alpha$ -Phenylamido- $\gamma$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Buten- $\beta$ -Carbon-säure. Sm. 103—104° (107—108°) (*B.* 35, 3947 *C.* 1903 [1] 18; *B.* 35, 4326 *C.* 1903 [1] 283; *B.* 35, 4439 *C.* 1903 [1] 283; *B.* 36, 937 *C.* 1903 [1] 1018).  
 \*8) Äthylester d.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ -Carbon-säure. Sm. 78° (80°) (*B.* 35, 3947 *C.* 1903 [1] 18; *B.* 35, 4326 *C.* 1903 [1] 283; *B.* 35, 4439 *C.* 1903 [1] 283; *B.* 36, 937 *C.* 1903 [1] 1018; *Soc.* 83, 1295 *C.* 1904 [1] 94).  
 15) Äthylester d.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ -Carbon-säure. Sm. 103° (*Soc.* 85, 1177 *C.* 1904 [2] 1216).
- $C_{19}H_{21}O_3N_3$  C 67,3 — H 6,2 — O 14,1 — N 12,4 — M. G. 339.  
 1) Phenylamid d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 206° (*J. pr.* [2] 70, 212 *C.* 1904 [2] 1460).  
 2) Di[Methylphenylamid] d. Oximidomalonäthyläthersäure. Sm. 138° (*Soc.* 83, 43 *C.* 1903 [1] 442).  
 3) isom. Di[Methylphenylamid] d. Oximidomalonäthyläthersäure. Sm. 168° (*Soc.* 83, 43 *C.* 1903 [1] 442).
- $C_{19}H_{21}O_4N_3$  C 64,2 — H 5,9 — O 18,0 — N 11,8 — M. G. 355.  
 1) Antipyrinorthoform (*A.* 325, 317 *C.* 1903 [1] 769).  
 2) isom. Antipyrinorthoform. Sm. 93° (*A.* 325, 318 *C.* 1903 [1] 769).
- $C_{19}H_{21}NCl_2$  1) 5,10-Dichlor-1,3,4,6,7,9-Hexamethyl-5,10-Dihydroakridin. Sm. 216° (*Soc.* 85, 1202 *C.* 1904 [2] 1060).
- $C_{19}H_{21}N_2Br$  2) Brommethylat d. 2-[Methylphenylamido]-1-Phenyl-1,2-Dihydrobenzol. Sm. 139° (*J. pr.* [2] 69, 134 *C.* 1904 [1] 816).
- $C_{19}H_{22}ON_2$  \*3) Cinchonin (*C. r.* 136, 181 *C.* 1903 [1] 525; *Soc.* 83, 624 *C.* 1903 [1] 1364; *M.* 24, 313 *C.* 1903 [2] 578).  
 \*8)  $\alpha$ -Isocinchonin (*M.* 24, 313 *C.* 1903 [2] 578).  
 \*9)  $\beta$ -Isocinchonin (*M.* 24, 313 *C.* 1903 [2] 578).  
 \*10) Allocinchonin (*M.* 24, 313 *C.* 1903 [2] 578).  
 \*20) Cinchonidin (*M.* 24, 669 *C.* 1903 [2] 1283).  
 \*22) Cinchonidin (*C. r.* 136, 184 *C.* 1903 [1] 525).  
 \*33)  $\alpha$ -i-Pseudocinchonidin (*M.* 24, 332 *C.* 1903 [2] 578).  
 \*34)  $\beta$ -i-Pseudocinchonidin (*M.* 24, 299 *C.* 1903 [2] 297; *M.* 24, 332 *C.* 1903 [2] 578; *M.* 24, 675 *C.* 1903 [2] 1284).
- $C_{19}H_{22}OS$  1) Phenyläther d.  $\gamma$ -Keto- $\epsilon$ -Merkapto- $\epsilon$ -Phenyl- $\beta$ -Methylpentan. Sm. 86—88° (*B.* 37, 507 *C.* 1904 [1] 883).
- $C_{19}H_{22}O_2N_2$  \*4)  $\alpha\epsilon$ -Di[Benzoylamido]pentan. Sm. 135° (*B.* 37, 3588 *C.* 1904 [2] 1407).  
 \*22) Phenylamid d.  $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 197—198° (*C.* 1903 [2] 288).

- $C_{10}H_{22}O_2N_2$  \*28) Di[Phenylamid] d. Pentan- $\alpha\delta$ -Dicarbonsäure (*C.* 1903 [2] 289).  
 29) Aethyläther d. Benzoylimido-2,4,5-Trimethylphenylamidooxymethan. Sm. 79—80° (*Am.* 32, 368 *C.* 1904 [2] 1507).  
 30) isom. Phenylamid d.  $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 203 bis 204° (*C.* 1903 [2] 288).  
 31) Phenylamid d.  $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm. 147° (*C.r.* 138, 580 *C.* 1904 [1] 925).
- $C_{19}H_{22}O_3N_2$  \*1) Dioxycinchonidin<sup>P</sup> (*J. pr.* [2] 69, 196 *C.* 1904 [1] 1448).  
 $C_{19}H_{22}O_3S$  1)  $\gamma$ -Keto- $\epsilon$ -Phenylsulfon- $\epsilon$ -Phenyl- $\beta$ -Methylpentan. Sm. 161—164° (*B.* 37, 507 *C.* 1904 [1] 883).
- $C_{19}H_{22}O_4N_2$  11)  $\beta\beta$ -Di[ $\beta$ -Acetylamido-4-Oxyphenyl]propan (*C.* 1904 [2] 1737).  
 12) Di[4-Methoxyphenylamid] d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 241 bis 242° (*G.* 34 [2] 264 *C.* 1904 [2] 1453).
- $C_{19}H_{22}O_4N_4$  2) Phenylhydrazon d. Glyazindihydrotetramethylidimalonsäuremethylester- $\epsilon$ -Laktone. Sm. 270° (*Soc.* 83, 1259 *C.* 1903 [2] 1423).  
 $C_{19}H_{22}O_5N_2$  C 63,7 — H 6,1 — O 22,4 — N 7,8 — M. G. 358.  
 1) Diäthylester d. 1-Benzoylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 123—124° (*B.* 35, 4315 *C.* 1903 [1] 336).  
 2) Verbindung (aus uns-Phenylbenzylhydrazin u. Rhamnose). Sm. 50—60° (*Soc.* 83, 1289 *C.* 1904 [1] 86).
- $C_{19}H_{22}N_3J$  1) 2-Jodäthylat d. 5-Methylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 184—185° (*B.* 36, 3277 *C.* 1903 [2] 1189).
- $C_{19}H_{26}ON$  6)  $\alpha$ -Phenyläthylamid d.  $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 112° (*B.* 37, 2703 *C.* 1904 [2] 518).  
 7) isom.  $\alpha$ -Phenyläthylamid d.  $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 85—87° (*B.* 37, 2703 *C.* 1904 [2] 518).
- $C_{19}H_{28}O_2N$  8) Aethyläther d. 4-Diäthylamido-3'-Oxydiphenylketon. Sm. 104° (D.R.P. 65952). — \*III, 153.  
 9) Benzoat d.  $\gamma$ -Dimethylamido- $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Methylpropan. HCl (*C.r.* 138, 768 *C.* 1904 [1] 1196).  
 10) Phenylamidoformiat d.  $\gamma$ -Oxy- $\alpha$ -Phenyl- $\gamma$ -Methylbutan. Sm. 94—95° (*B.* 37, 2317 *C.* 1904 [2] 217).  
 11) Phenylamidoformiat d.  $\gamma$ -Oxy- $\gamma$ -Benzylpentan. Sm. 98° (*B.* 37, 1724 *C.* 1904 [1] 1515).
- $C_{19}H_{28}O_3N$  12) Aethylmorphin (D.R.P. 102634, 107225, 108075). — \*III, 669.  
 $C_{19}H_{28}O_4N$  \*4) Cocamin (oder  $C_{35}H_{46}O_8N_2$ ) (*J. pr.* [2] 66, 418 *C.* 1903 [1] 528).  
 $C_{19}H_{28}O_6N$  \*2) Diäthylester d. 5-Keto-1-Oxy-1-Methyl-3-[3-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäure. Sm. 146° (148°) (*Soc.* 83, 719 *C.* 1903 [2] 54; A. 332, 35 *C.* 1904 [1] 1566).  
 \*3) Diäthylester d. 5-Keto-1-Oxy-1-Methyl-3-[4-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäure. Sm. 164° (A. 332, 31 *C.* 1904 [1] 1566).  
 4) Diäthylester d. isom. 5-Keto-1-Oxy-1-Methyl-3-[4-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäure. Sm. 152—153° (A. 332, 32 *C.* 1904 [1] 1566).  
 5) Diäthylester d. 3,5-Dioxy-3-Methyl-1-[3-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-2,6-Dicarbonsäure. Fl. Na +  $C_2H_5O$  (A. 332, 36 *C.* 1904 [1] 1566).  
 6) Diäthylester d. 3,5-Dioxy-3-Methyl-1-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-2,6-Dicarbonsäure. Sm. 129—130°. Na (A. 332, 31 *C.* 1904 [1] 1566).  
 7) Diäthylester d. isom. 3,5-Dioxy-3-Methyl-1-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-2,6-Dicarbonsäure. Sm. 130—135° (A. 332, 33 *C.* 1904 [1] 1566).
- $C_{19}H_{24}ON_2$  \*8) Cinchonamin (*C.r.* 136, 185 *C.* 1903 [1] 525).  
 18)  $\alpha$ -[d-sec. Butyl]- $\beta\beta$ -Dibenzylharnstoff. Sm. 69° (*Ar.* 242, 71 *C.* 1904 [1] 999).  
 19) 4-Dimethylamido-4'-Diäthylamidodiphenylketon. Sm. 94° (D.R.P. 44077). — \*III, 149.
- $C_{19}H_{24}O_4N_2$  4) Phenylbenzylhydrazon d. Fukose. Sm. 172—173° (*B.* 37, 307 *C.* 1904 [1] 307).  
 $C_{19}H_{24}O_4N_4$  4) Phenylhydrazon-Methylphenylhydrazon d. d-Glykose. Sm. 192° (192—195°) (*B.* 37, 3852 *C.* 1904 [2] 1711; *B.* 37, 3363 *C.* 1904 [2] 1210).

- $C_{19}H_{24}O_4N_4$  5) isom. Phenylhydrazon - Methylphenylhydrazon d. d - Glykose. Sm. 205° (B. 37, 3852 C. 1904 [2] 1711).
- $C_{19}H_{24}O_4S_2$  2)  $\alpha$ -Isoamylsulfon- $\alpha$ -Benzylsulfon- $\alpha$ -Phenylmethan. Sm. 145° (B. 36, 301 C. 1903 [1] 500).
- $C_{19}H_{24}O_6N_2$  4) Phenylbenzylhydrazon d. d-Galaktose. Sm. 189—190° (B. 37, 30 C. 1904 [1] 649).
- 5) Verbindung (aus 2-Keto-1,4,5-Triox-1,3-Dimethyl-4,5-Diphenyl-Pentamethylen). Sm. 185° u. Zers. (Soc. 83, 301 C. 1903 [1] 878). C 49,1 — H 5,2 — O 27,6 — N 18,1 — M. G. 464.
- $C_{19}H_{24}O_8N_8$  1) Benzoylpenta[Amidoacetyl]amidoessigsäure. Sm. 280—285° (268 u. Zers.). Ag (J. pr. [2] 24, 240; [2] 26, 197; B. 16, 756; B. 37, 127 C. 1904 [1] 1335; J. pr. [2] 70, 88, 99 C. 1904 [2] 1034, 1035). — II, 1182, 1190.
- $C_{19}H_{24}NJ$  1) Aethylallylbenzyl-4-Methylphenylammoniumjodid. Zers. bei 111 bis 116° (B. 37, 2725 C. 1904 [2] 592).
- $C_{19}H_{24}N_3S$  9)  $\alpha$ -[d - sec. Butyl]- $\beta\beta$ -Dibenzylthioharnstoff. Sm. 56° (Ar. 242, 6 C. 1904 [1] 998).
- $C_{19}H_{25}ON$  C 80,6 — H 8,8 — O 5,7 — N 4,9 — M. G. 283.
- 1) Aethylallylbenzyl-4-Methylphenylammoniumhydroxyd. Salze siehe (B. 37, 2726 C. 1904 [2] 592).
- $C_{19}H_{25}O_3N$  C 72,4 — H 7,9 — O 15,2 — N 4,4 — M. G. 315.
- 1) Dihydromethylmorphimethin (B. 32, 1048). — \*III, 672.
- $C_{19}H_{25}O_4N$  4) Aethylester d.  $\beta$ -Methylamido- $\zeta$ -Keto- $\gamma$ -Acetyl- $\delta$ -Phenyl- $\beta$ -Hepten- $\epsilon$ -Carbonsäure. Sm. 198° (B. 36, 2186 C. 1903 [2] 569).
- $C_{19}H_{25}O_7N$  C 60,1 — H 6,6 — O 29,5 — N 3,7 — M. G. 379.
- 1) Diäthylester d. Anhydrocotarninmalonsäure. Sm. 73° (B. 37, 2740 C. 1904 [2] 544).
- $C_{19}H_{25}O_7N_5$  C 52,4 — H 5,7 — O 25,7 — N 16,1 — M. G. 435.
- 1) Aethylester d. Benzoyltetra[Amidoacetyl]amidoessigsäure. Sm. 256—257° u. Zers. (244—246°) (B. 37, 1299 C. 1904 [1] 1337; J. pr. [2] 70, 96 C. 1904 [2] 1035).
- $C_{19}H_{25}N_2Br$  \*5) isom 4-Bromphenylhydrazon d.  $\beta$ -Jonon. Sm. 166—167° (C. 1904 [1] 281).
- 6) 4-Bromphenylhydrazon d. Camphenilidenaceton. Sm. 114—115° (D.R.P. 138211 C. 1903 [1] 269).
- $C_{19}H_{26}O_4N_6$  C 56,7 — H 6,5 — O 15,9 — N 20,9 — M. G. 402.
- 1) Di[Isopropylidenhydrazid] d.  $\alpha$ -Benzoylamidoacetylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 183° u. Zers. (J. pr. [2] 70, 176 C. 1904 [2] 1396).
- $C_{19}H_{26}O_5N_4$  C 58,5 — H 6,7 — O 20,5 — N 14,3 — M. G. 390.
- 1) Aethylester d.  $\beta$ -[ $\beta$ -Benzoylamidoacetylamidobutyryl]hydrazonbuttersäure. Sm. 142° (J. pr. [2] 70, 210 C. 1904 [2] 1460).
- $C_{19}H_{26}NJ$  1) Methyl-1-Amylphenylbenzylammoniumjodid (C. 1904 [2] 952).
- 2) Methylisobutyldibenzylammoniumjodid. Sm. 174—175° (Soc. 83, 1412 C. 1904 [1] 438).
- $C_{19}H_{27}O_2Br_3$  1) Laurat d. 3,5-Dibrom-2-Oxy-1-Brommethylbenzol. Sm. 60—61° (A. 332, 201 C. 1904 [2] 211).
- $C_{19}H_{27}O_5N_3$  C 60,5 — H 7,1 — O 21,2 — N 11,1 — M. G. 377.
- 1) Aethylester d.  $\beta$ -[ $\beta$ -Benzoylamidoacetylamidobutyryl]amidobuttersäure. Sm. 103° (J. pr. [2] 70, 220 C. 1904 [2] 1461).
- $C_{19}H_{27}O_5Cl$  1) Chlorhydrin d. Dehydrodioxyparasantonensäurediäthylester. Sm. 170—171° (C. 1903 [2] 1447).
- $C_{19}H_{28}O_8S_2$  1) Diäthylester d. 4-Methyl-1,3-Phenylendi[ $\alpha$ -Sulfonbuttersäure]. Fl. (J. pr. [2] 68, 338 C. 1903 [2] 1172).
- $C_{19}H_{29}O_4N$  2) Aethyloxydhydrat d. Atropin. Nitrat, Sulfat (D.R.P. 138443 C. 1903 [1] 427).
- $C_{19}H_{30}O_6N_6$  C 46,9 — H 6,2 — O 29,6 — N 17,3 — M. G. 486.
- 1) Leimpepton (C. 1903 [1] 1144).
- 2)  $\beta$ -Trypsinglutinpepton (H. 38, 258 C. 1903 [2] 210; H. 38, 320 C. 1903 [2] 211).
- $C_{19}H_{31}ON$  \*1) 2-Methylphenylamid d. Laurinsäure. Sm. 81—82° (Bl. [3] 29, 1121 C. 1904 [1] 259).
- 2) 4-Methylphenylamid d. Laurinsäure. Sm. 82—83° (Bl. [3] 29, 1122 C. 1904 [1] 259).

- $\text{H}_{21}\text{O}_2\text{N}$  C 74,7 — H 10,2 — O 10,5 — N 4,6 — M. G. 305.  
 1) 4-Methylphenylamid d.  $\alpha$ -Oxyundekan- $\alpha$ -Carbonsäure. Sm. 100° (Bl. [3] 29, 1127 C. 1904 [1] 261).  
 $\text{H}_{27}\text{O}_4\text{N}_3$  C 61,4 — H 10,0 — O 17,2 — N 11,3 — M. G. 371.  
 1) Semicarbazonoxysearinsäure. Sm. 134—135° (B. 36, 2659 C. 1903 [2] 826).

## — 19 IV —

- $\text{H}_{10}\text{O}_4\text{NBr}$  1) Monooxim d. 3-Brom-2-[1,3-Diketo-2,3-Dihydro-2-Indenyl]-1,4-Naphtochinon. Sm. 233° (B. 35, 3958 C. 1903 [1] 32).  
 $\text{H}_{10}\text{O}_6\text{N}_4\text{S}$  1) 2,4,6-Trinitrophenyläther d. 5-Merkaptoakridin. Sm. 233° u. Zers. (J. pr. [2] 68, 81 C. 1903 [2] 445).  
 $\text{H}_{10}\text{O}_6\text{N}_4\text{Se}$  1) 2,4,6-Trinitrophenyläther d. 5-Merkaptoakridin. Zers. bei 198°. Pikrat (J. pr. [2] 68, 94 C. 1903 [2] 446).  
 $\text{H}_{11}\text{O}_4\text{N}_3\text{S}$  1) 2,4-Dinitrophenyläther d. 5-Merkaptoakridin. Sm. 290° u. Zers. (2HCl,  $\text{PtCl}_4$ ), Pikrat (J. pr. [2] 68, 83 C. 1903 [2] 445).  
 $\text{H}_{11}\text{O}_4\text{N}_3\text{Se}$  1) 2,4-Dinitrophenyläther d. 5-Merkaptoakridin. Sm. 273°. (2HCl,  $\text{PtCl}_4$ ), Pikrat (J. pr. [2] 68, 96 C. 1903 [2] 446).  
 $\text{H}_{11}\text{O}_{11}\text{N}_5\text{S}$  1) Di[2-Nitrophenylester] d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 164° (Am. 30, 381 C. 1904 [1] 275).  
 2) Di[4-Nitrophenylester] d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 152° (Am. 30, 381 C. 1904 [1] 275).  
 $\text{H}_{12}\text{O}_2\text{NBr}$  2) Brom-o-Methylchinophthalon (B. 36, 3918 C. 1904 [1] 98).  
 $\text{H}_{12}\text{O}_2\text{N}_3\text{Br}$  1) 6-[4-Brom-1-Amido-2-Naphtyl]azo-1,2-Benzpyron. Sm. 240—241° u. Zers. (Soc. 85, 751 C. 1904 [2] 448).  
 $\text{H}_{12}\text{O}_6\text{N}_3\text{Cl}$  2)  $\alpha$ -Chlor-4,4',4''-Trinitrotriphenylmethan (B. 37, 1639 C. 1904 [1] 1649).  
 $\text{H}_{12}\text{O}_6\text{N}_5\text{Cl}$  1)  $\alpha$ -Imidobenzyl-4-Chlorphenyl-2,4,6-Trinitrophenylamin. Sm. 171° u. Zers. (J. pr. [2] 67, 468 C. 1903 [1] 1422).  
 $\text{H}_{13}\text{O}_2\text{NBr}_4$  2) o-Methylchinophthalontetrabromid (B. 36, 3918 C. 1904 [1] 98).  
 $\text{H}_{13}\text{O}_4\text{NS}$  1) 5-[4-Oxyphenyl]akridin-P-Sulfonsäure. Na (Bl. [3] 31, 1093 C. 1904 [2] 1509).  
 $\text{H}_{13}\text{O}_7\text{NS}$  \*1) Diphenylester d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 118—119° (Am. 30, 374 C. 1904 [1] 275).  
 $\text{H}_{13}\text{O}_{11}\text{N}_5\text{S}$  1) 4-Methylbenzolsulfonat d. 2',4', $\beta$ , $\beta$ -Tetranitro-4-Oxydiphenylamin. Sm. 189,5° (B. 37, 1732 C. 1904 [1] 1521).  
 $\text{H}_{14}\text{O}_2\text{NCl}$  1)  $\alpha$ -Chlor-4-Nitrotriphenylmethan. Sm. 92—93° (B. 37, 606 C. 1904 [1] 887).  
 $\text{H}_{14}\text{O}_5\text{N}_2\text{Br}_4$  1) 1,3-Dibrom-2-Keto-1,3-Di[ $\alpha$ -Brom-3-Nitrobenzyl]-R-Pentamethylen. Sm. 178° u. Zers. (B. 36, 1504 C. 1903 [1] 1352).  
 $\text{H}_{15}\text{O}_2\text{NBr}_2$  1) N-Acetyl-3,5-Dibrom-2-Oxybenzyl-2-Naphtylamin. Sm. 137° (A. 332, 187 C. 1904 [2] 210).  
 $\text{H}_{15}\text{O}_5\text{NS}$  \*4) Benzoylphenylamid d. Benzolsulfonsäure. Sm. 104° (und 114°) (C. r. 137, 714 C. 1903 [2] 1428; Bl. [3] 31, 623 C. 1904 [2] 97).  
 6) 4-Phenylsulfonamidodiphenylketon. Sm. 156° (Soc. 85, 397 C. 1904 [1] 1404).  
 $\text{H}_{15}\text{O}_4\text{N}_3\text{S}$  1) Phenylamid d. 3-Phenylsulfon-4-Oxyphenylazoameisensäure. Sm. 195—196° u. Zers. (A. 334, 179 C. 1904 [2] 834).  
 $\text{H}_{15}\text{O}_7\text{N}_3\text{S}$  1) 4-Methylbenzolsulfonat d. 2',4'-Dinitro-4-Oxydiphenylamin. Sm. 178,5 (B. 37, 1731 C. 1904 [1] 1521).  
 $\text{H}_{16}\text{O}_2\text{N}_2\text{S}$  2) 8-4-Methylphenyläther d. 4'-Merkapto-2,4-Dioxyazobenzol. (J. pr. [2] 68, 274 C. 1903 [2] 994).  
 $\text{H}_{16}\text{O}_2\text{N}_3\text{Br}$  1) 8-Brom-5-[6-Cumarylazo]amido-1,2,3,4-Tetrahydronaphtalin. Zers. bei 165—168° (Soc. 85, 750 C. 1904 [2] 448).  
 $\text{H}_{16}\text{O}_2\text{N}_4\text{S}$  1) 4-Methylphenyläther d. 4-Nitro-4'-Merkaptodiazooamidobenzol. Sm. 166° u. Zers. (J. pr. [2] 68, 276 C. 1903 [2] 994).  
 $\text{H}_{16}\text{O}_5\text{N}_2\text{Br}_2$  1)  $\beta$ -Dibrom-P-Di[Phenylamido]-1,2-Benzochinonmonomethylhemiacetal. Sm. 144—145° (B. 35, 3854 C. 1903 [1] 26).  
 $\text{H}_{16}\text{O}_6\text{N}_2\text{S}$  \*2) s-Di[Phenylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure (Am. 30, 273 C. 1903 [2] 1120).  
 $\text{H}_{16}\text{O}_4\text{N}_4\text{S}$  2)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Sulfophenyl]azo- $\alpha$ -2-Oxyphenylmethan. K (C. 1903 [2] 427).  
 $\text{H}_{17}\text{O}_4\text{N}_3\text{S}$  1) 3-Nitrobenzylidendiphenylaminanhydrosulfit. Sm. 128° u. Zers. (A. 316, 140). — \*III, 21.

- $C_{19}H_{17}O_4N_3S$  2) Phenylamid d.  $\alpha$ -Phenylsulfon- $\alpha$ -[4-Oxyphenyl]hydrazin- $\beta$ -Carbonsäure. Sm. 166—167° u. Zers. (A. 334, 177 C. 1904 [2] 834).
- $C_{19}H_{17}O_5NS$  2) 4-Methylbenzolsulfonat d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\beta$ -Phenylakrylsäureäthylester. Sm. 84° (Bl. [3] 31, 338 C. 1904 [1] 1135).
- $C_{19}H_{17}O_6N_3S$  2) 6-[4-Acetylamidophenyl]ureido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 148505 C. 1904 [1] 488).
- $C_{19}H_{18}O_2N_2S$  3) Benzylidendiphenylaminanhydrosulfit. Sm. 125° (A. 316, 137) — \*III, 20.
- 4) isom. Benzylidendiphenylaminanhydrosulfit +  $\frac{1}{2}H_2O$ . Sm. 132 bis 133° u. Zers. (A. 316, 139). — \*III, 20
- $C_{19}H_{18}O_2N_3Cl$  1) Diäthyläther d. 6-Chlor-2,4-Di[4-Oxyphenyl]-1,3,5-Triazin. Sm. 149° corr. (B. 36, 3194 C. 1903 [2] 956).
- $C_{19}H_{18}O_3NP$  3) Phenylmonamid d. Phosphorsäurephenyl-4-Methylphenylester. Sm. 106° (A. 326, 227 C. 1903 [1] 866).
- 4) Methylphenylmonamid d. Phosphorsäurediphenylester. Sm. 50 (A. 326, 254 C. 1903 [1] 868).
- 5) Benzylmonamid d. Phosphorsäurediphenylester. Sm. 104—105 (A. 326, 175 C. 1903 [1] 819).
- $C_{19}H_{19}O_2NBr_2$  1) Benzozat d. 1-[3,5-Dibrom-2-Oxybenzyl]hexahydropyridin. Sm. 110—111° (A. 332, 220 C. 1904 [2] 202).
- $C_{19}H_{19}O_2N_2P$  2) Phenylamid-4-Methylphenylamid d. Phosphorsäuremonophenylester. Sm. 136—137° (A. 326, 249 C. 1903 [1] 868).
- $C_{19}H_{19}O_3NBr_2$  2) Acetat d. N-Acetyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 140° (A. 332, 184 C. 1904 [2] 200).
- $C_{19}H_{20}ON_2Br_2$  \*1) Dibromcinchonidin (J. pr. [2] 69, 193 C. 1904 [1] 1448).
- 5) isom. Dibromcinchonidin. Sm. 186°. (2HBr, Br<sub>2</sub>) (J. pr. [2] 69, 209 C. 1904 [1] 1448).
- $C_{19}H_{20}ON_3P$  3) Di[Phenylamid]-Methylphenylamid d. Phosphorsäure. Sm. 192 (A. 326, 255 C. 1903 [1] 869).
- $C_{19}H_{20}O_2NBr_3$  1) Acetat d. 3,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 156—157° (A. 334, 300 C. 1904 [2] 985).
- 2) Acetat d. 2,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 150—151,5° (A. 334, 324 C. 1904 [2] 988).
- $C_{19}H_{20}O_3NJ$  1) Jodmethylat d. 6,7-Dioxy-1-Benzylisochinolin-dimethyläther. Sm. 206—207° (B. 37, 3401 C. 1904 [2] 1000).
- $C_{19}H_{20}O_4N_2Br_2$  1) Di[p-Brom-4-Methoxyphenylamid] d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 82—83° (G. 34 [2] 267 C. 1904 [2] 1453).
- $C_{19}H_{21}ON_2Br$  \*3) isom. Bromcinchonin. Sm. 225—226°. HCl + 2H<sub>2</sub>O, 2HBr Oxalat + 7H<sub>2</sub>O (J. pr. [2] 68, 430 C. 1904 [1] 179).
- 4) Bromcinchonidin. Sm. 218°. 2HBr + 2H<sub>2</sub>O, Oxalat + 2H<sub>2</sub>O (J. pr. [2] 69, 199 C. 1904 [1] 1448).
- $C_{19}H_{21}O_2NBr_2$  1) Acetat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 144—145° (A. 334, 288 C. 1904 [2] 984).
- 2) Acetat d. 2,6-Dibrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 145—146,5° (A. 334, 320 C. 1904 [2] 987).
- $C_{19}H_{21}O_4N_4Br$  1) 4-Bromphenylhydrazon d. Glyazindihydrotetramethyldimalonsäuremethylester- $\alpha$ -Lakton. Sm. 196° (Soc. 83, 1259 C. 1903 [2] 1423).
- $C_{19}H_{22}ONBr_3$  1) 3,6,3'-Tribrom-4'-Diäthylamido-4-Oxy-2,5-Dimethyldiphenylmethan (A. 334, 318 C. 1904 [2] 987).
- $C_{19}H_{22}ON_2Cl_2$  1) Dichlordihydrocinchonin. Sm. 215° (J. 1847/48, 618; B. 25, 1543 M. 25, 904 C. 1904 [2] 1319).
- 2) Dichlordihydroalloeicinchonin. Sm. 205—206° (M. 25, 905 C. 1904 [2] 1319).
- $C_{19}H_{22}ON_2Br_2$  \*1) Dibromdihydrocinchonin. 2HBr, 2HNO<sub>3</sub> + H<sub>2</sub>O (M. 24, 130 C. 1903 [1] 976; J. pr. [2] 68, 428, 436 C. 1904 [1] 179).
- \*2) Dibromdihydrocinchonidin. (2HBr, Br<sub>2</sub>) (J. pr. [2] 69, 193 C. 1904 [1] 1447).
- 3) Dibromdihydro- $\alpha$ -i-Cinchonin? Sm. 199—200° (M. 24, 125 C. 1903 [1] 976).

- $C_{15}H_{22}ON_2Br_2$  4) Dibromdihydro- $\beta$ -i-Cinchonin? Sm. 217—218° (*M.* 24, 126 *C.* 1903 [1] 976).
- $C_{15}H_{22}ON_3P$  1) Methylphenylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 148° (*A.* 326, 255 *C.* 1903 [1] 869).
- $C_{15}H_{22}O_2NJ$  1) Jodmethylat d. Methylapomorphin. Sm. 229—230° u. Zers. (*B.* 35, 4388 *C.* 1903 [1] 339).
- $C_{15}H_{22}O_2N_2Br_2$  1) 3,6-Dibrom-6'-Dimethylamido-3'-Acetylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 223—224° (*A.* 334, 314 *C.* 1904 [2] 987).
- $C_{15}H_{22}O_3NJ$  3) Jodmethylat d. Codeinon. Sm. 180° (*B.* 36, 3073 *C.* 1903 [2] 953).
- $C_{15}H_{23}ONBr_2$  2) 2,6-Dibrom-4'-Diäthylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 132—133°. HBr (*A.* 334, 325 *C.* 1904 [2] 988).
- $C_{15}H_{23}ON_2Cl$  \*2) Hydrochlor- $\alpha$ -Isocinchonin. Sm. 185—186°.  $H_2SO_4 + 4H_2O$  (*M.* 25, 899 *C.* 1904 [2] 1319).
- $C_{15}H_{23}ON_3Br$  \*1) Hydrobromcinchonin. 2HBr (*M.* 24, 128 *C.* 1903 [1] 976).
- $C_{15}H_{24}O_2N_3Br$  1) Mentylester d.  $\alpha$ -Cyan- $\alpha$ -[4-Bromphenyl]azoessigsäure (zwei isom. Formen). Sm. 97—98° (u. 95—105°) (*C.* 1903 [1] 566; *Soz.* 85, 45 *C.* 1904 [1] 789).
- $C_{15}H_{24}O_4NJ$  1) Jodmethylat d. Oxycodin. +  $\frac{1}{2}C_2H_6O$  (*B.* 36, 3070 *C.* 1903 [2] 953).
- $C_{15}H_{24}O_6N_2S$  1) r- $\alpha$ -[2-Naphtylsulfon- $\alpha$ -Amidoisocapronyl]amidopropionsäure. Sm. 151° (*B.* 37, 3107 *C.* 1904 [2] 1210).
- $C_{15}H_{25}O_2NBr_2$  1) Aethylhydroxyd d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 189—190°. Salze siehe (*B.* 29, 1125; *A.* 334, 316 *C.* 1904 [2] 987). — \*II, 455.
- $C_{15}H_{26}ON_3P$  1) Di[4-Methylphenylamid] d. 1-Piperidylphosphinsäure. Sm. 173° (*A.* 326, 187 *C.* 1903 [1] 820). — \*IV, 9.
- $C_{15}H_{26}N_3SP$  1) Di[4-Methylphenylamid] d. 1-Piperidylthiophosphinsäure. Sm. 190° (*A.* 326, 215 *C.* 1903 [1] 822).
- $C_{15}H_{28}O_3NBr$  1) Bromäthylat d. Atropin. Sm. 173—174° (*D.R.P.* 145996 *C.* 1903 [2] 1226).
- $C_{15}H_{23}N_3SP$  1) Amylmonamid-Di[4-Methylphenylamid] d. Thiophosphorsäure. Sm. 129° (*A.* 326, 205 *C.* 1903 [1] 821).
- $C_{15}H_{33}O_3NS$  1) Aethylamid d.  $\epsilon$ -Oxy- $\epsilon$ -Phenyl- $\beta$  $\beta$ -Dimethylnonan- $\epsilon^2$ -Sulfonsäure. Sm. 66—67° (*B.* 37, 3261 *C.* 1904 [2] 1031).
- $C_{15}H_{34}O_2N_2J_2$  1) Jodmethylat d. Sparteiniodammoniumessigsäuremethylester. Sm. 232° (*Ar.* 242, 518 *C.* 1904 [2] 1412).
- 2) isom. Jodmethylat d. Sparteiniodammoniumessigsäuremethylester. Sm. 249° (*Ar.* 242, 518 *C.* 1904 [2] 1412).
- $C_{15}H_{45}N_3JP$  1) Methyltri[Diäthylamid]phosphoniumjodid. Sm. 83—84° (*A.* 326, 170 *C.* 1903 [1] 762).

## — 19 V —

- $C_{15}H_{13}O_2N_2BrS$  1) Dianil d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 199 bis 200° (*Am.* 30, 495 *C.* 1904 [1] 370).
- $C_{15}H_{14}O_3NClS$  1) 4-Phenylsulfonchloramidodiphenylketon. Sm. 114° (*Soz.* 85, 397 *C.* 1904 [1] 1404).
- $C_{15}H_{15}O_3N_2BrS$  1) s-Di[Phenylamid] d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 238—239° (*Am.* 30, 494 *C.* 1904 [1] 371).
- 2) uns-Di[Phenylamid] d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. noch nicht bei 300° (*Am.* 30, 494 *C.* 1904 [1] 370).
- $C_{15}H_{15}O_3N_4ClS$  1)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Sulfophenyl]azo- $\alpha$ -[2-Chlorphenyl]methan. K (*C.* 1903 [2] 427).
- $C_{15}H_{17}O_3NBrP$  1) 2-Brom-4-Methylphenylmonamid d. Phosphorsäurediphenylester. Sm. 126° (*A.* 326, 239 *C.* 1903 [1] 868).
- $C_{15}H_{18}ON_2ClS$  1) 2-Chlormethylat d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol-5-Benzoeat. Sm. 72° (*A.* 331, 219 *C.* 1904 [1] 1219).
- $C_{15}H_{24}ONBr_2J$  1) Jodäthylat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 172—173° (*A.* 334, 316 *C.* 1904 [2] 987).

**C<sub>20</sub>-Gruppe.**

- C<sub>20</sub>H<sub>14</sub>** \*3) 2,2'-Binaphtyl. Sm. 187° (A. 332, 50 C. 1904 [2] 40).  
 \*5) 9-Benzylidenfluoren (C. 1903 [1] 1369).
- C<sub>20</sub>H<sub>16</sub>** \*1) 2-Benzylfluoren (M. 25, 450 C. 1904 [2] 450).  
 7) ααβ-Triphenyläthen. Sm. 67—68° (B. 37, 1431 C. 1904 [1] 1351; B. 37, 1455 C. 1904 [1] 1353).  
 8) 1,4-Dibenzylidenbenzol (B. 37, 1468 C. 1904 [1] 1342).
- C<sub>20</sub>H<sub>18</sub>** \*1) ααβ-Triphenyläthan. Sm. 54°; Sd. 348—349° (B. 37, 1455 C. 1904 [1] 1353).  
 \*3) 3-Methyltriphenylmethan. Sm. 61—62° (62—63°); Sd. 354° (B. 37, 1251 C. 1904 [1] 1355; B. 37, 3358 C. 1904 [2] 1126; B. 37, 3696 C. 1904 [2] 1500).  
 \*4) 4-Methyltriphenylmethan. Sm. 71° (B. 37, 658 C. 1904 [1] 951).  
 \*5) 1,4-Dibenzylbenzol. Sm. 83—84° (B. 37, 1467 C. 1904 [1] 1342).  
 \*7) αβ-Diphenyl-αγδζ-Oktatetraën. Sm. 225° u. Zers. (A. 331, 165 C. 1904 [1] 1211).  
 8) ααα-Triphenyläthan. Sm. 95° (B. 36, 472 C. 1903 [1] 638).  
 9) 2-Methyltriphenylmethan. Sm. 82—83° (B. 37, 1249 C. 1904 [1] 1355).
- C<sub>20</sub>H<sub>20</sub>** \*1) Diphenyldibutadiën. Sd. 217—220°<sub>17</sub> (B. 36, 4325 C. 1904 [1] 453; B. 37, 2274 C. 1904 [2] 217).  
 \*2) Diphenylecyklooktadiën. Sd. 204—206°<sub>10</sub> (B. 36, 4322 C. 1904 [1] 453).
- C<sub>20</sub>H<sub>22</sub>** 2) Kohlenwasserstoff (aus Cholesterylchlorid). Sd. 241—265°<sub>42</sub> (M. 24, 662 C. 1903 [2] 1236).

## — 20 II —

- C<sub>20</sub>H<sub>12</sub>O<sub>2</sub>** 4) Acenaphtanthrachinon. Sm. 215—220° (A. 327, 102 C. 1903 [1] 1229).
- C<sub>20</sub>H<sub>12</sub>O<sub>3</sub>** 4) 2-Benzoyl-3,4-β-Naphtopyron (α-Benzoyl-β-Naphtocumarin). Sm. 207° (B. 36, 1974 C. 1903 [2] 377).
- C<sub>20</sub>H<sub>12</sub>O<sub>4</sub>** 12) Acetat d. 11-Oxy-5,12-Naphtacenchinon (B. 36, 551 C. 1903 [1] 720).
- C<sub>20</sub>H<sub>12</sub>O<sub>6</sub>** 5) 2<sup>3</sup>,3-Lakton d. 1-Keto-3-Methoxyl-2-[2-Oxy-1,3-Diketo-2,3-Dihydro-2-Indenyl]-2,3-Dihydroinden-3-Carbonsäure. Sm. 198° (B. 35, 3962 C. 1903 [1] 33).
- C<sub>20</sub>H<sub>12</sub>O<sub>7</sub>** \*2) Phloroglucinphtalein (B. 36, 1071 C. 1903 [1] 1181).  
 \*5) Gallein (B. 36, 1561 C. 1903 [2] 118).
- C<sub>20</sub>H<sub>12</sub>O<sub>8</sub>** 2) Trioxyfluorescein (B. 36, 1083 C. 1903 [1] 1183).
- C<sub>20</sub>H<sub>12</sub>N<sub>2</sub>** \*1) Dinaphtazin (as-1,2-Naphtazin). Sm. 279° (B. 36, 4172 C. 1904 [1] 287).  
 8) 1,1'-Dinaphto-2,2'-Orthodiazin. Sm. 267—268° (2HCl, PtCl<sub>4</sub>) (B. 36, 4162 C. 1904 [1] 286).
- C<sub>20</sub>H<sub>13</sub>N** \*1) ββ-Dinaphtylenamin (1,1'-Dinaphto-2,2'-Imin). Sm. 157° (155°) (B. 36, 4160 C. 1904 [1] 286; Soc. 83, 273 C. 1903 [1] 588, 883).  
 5) 1,2,2',1'-Dinaphtocarbazon. Sm. 231° (Soc. 83, 274 C. 1903 [1] 588, 883).
- C<sub>20</sub>H<sub>14</sub>O** \*1) 10-Oxy-9-Phenylanthracen. (HJ, J<sub>2</sub>), + J<sub>2</sub> (B. 37, 3342 C. 1904 [2] 1057).  
 \*2) 1,1'-Dinaphtyläther. Sm. 105° (B. 36, 2942 C. 1903 [2] 885).  
 \*5) 2-Benzoylfluoren (M. 24, 591 C. 1903 [2] 1276; M. 24, 592 C. 1903 [2] 1276; M. 25, 449 C. 1904 [2] 449).
- C<sub>20</sub>H<sub>14</sub>O<sub>2</sub>** \*6) 10-Oxy-9-Keto-10-Phenyl-9,10-Dihydroanthracen (C. r. 138, 125 C. 1904 [2] 118).
- C<sub>20</sub>H<sub>14</sub>O<sub>3</sub>** 17) 3,3'-Dioxy-2,2'-Binaphtyl. Sm. 216° (C. r. 138, 1618 C. 1904 [2] 338).  
 16) Methylenäther d. γ-Keto-γ-[p-Naphtyl]-α-[3,4-Dioxyphenyl]propen. Sm. 141° (B. 37, 1703 C. 1904 [1] 1497).  
 17) 3-Benzoylacenaphten-3<sup>2</sup>-Carbonsäure. Sm. 200° (A. 327, 99 C. 1903 [1] 1228).
- C<sub>20</sub>H<sub>14</sub>O<sub>4</sub>** \*15) Phenolphtalein (Soc. 85, 398).  
 \*21) Diphenylester d. Benzol-1,2-Dicarbonsäure. Sm. 73°; Sd. 405°<sub>77</sub> (B. 35, 4091 C. 1903 [1] 75).  
 24) Phenylester d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 80,5—81 (G. 34 [1] 268 C. 1904 [1] 1498).
- C<sub>20</sub>H<sub>14</sub>O<sub>5</sub>** 10) Verbindung (aus αβγ-Triketo-α-Phenylbutan). Sm. 168° (B. 36, 323 C. 1903 [2] 941).

- $C_{20}H_{14}O_6$  11) Verbindung (aus Resorcin u. Benzil). Sm. oberh.  $330^\circ$  (*B.* 36, 3051 *C.* 1903 [2] 1008; *B.* 36, 3054 *C.* 1903 [2] 1009).
- $C_{20}H_{14}O_6$  9)  $\alpha\alpha$ -Di[4-Oxy-1,2-Benzpyron-3]-äthan (Aethylidenbis- $\beta$ -Oxycumarin). Sm.  $165^\circ$  (*B.* 36, 465 *C.* 1903 [1] 636).
- 10) Fluoresceinsäure. Nur als Anhydrid bekannt (*A.* 183, 1; 215, 83; *B.* 29, 2629). — II, 2060; \*II, 1208.
- 11) Dimethyldioxyäthindiphtalid. Sm. noch nicht bei  $330^\circ$  (*B.* 37, 3346 *C.* 1904 [2] 1057).
- 12) Dimethyldioxyisoäthindiphtalid (3,6,9,11-Tetraoxy-1,7-Dimethyl-5,12-Naphtacenchinon). Sm. noch nicht bei  $330^\circ$  (*B.* 37, 3347 *C.* 1904 [2] 1057).
- $C_{20}H_{14}O_8$  9) 5,6-Diacetat d. 5,6-Dioxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran-3,4-Methylenäther (*B.* 29, 2435). — \*III, 534.
- $C_{20}H_{14}O_8$  4) Norcocaflavetin. Sm.  $270^\circ$  (*J. pr.* [2] 66, 416 *C.* 1903 [1] 528).
- $C_{20}H_{14}N_2$  \*4) 2,2'-Azonaphtalin. Sm.  $208^\circ$  (*B.* 36, 4159 *C.* 1904 [1] 286).
- $C_{20}H_{14}S_2$  \*1) 1,1'-Dinaphtyldisulfid (*Bl.* [3] 29, 762 *C.* 1903 [2] 620).
- $C_{20}H_{14}Se_2$  1) 1,1'-Dinaphtyldiselenid. Sm.  $87$ — $88^\circ$  (*Bl.* [3] 29, 763 *C.* 1903 [2] 621).
- $C_{20}H_{15}N$  12) 5-Benzylakridin. Sm.  $173^\circ$ . Pikrat (*B.* 37, 1565 *C.* 1904 [1] 1447).
- $C_{20}H_{15}N_3$  \*9) 6-Amido-2,3-Diphenyl-1,4-Benzdiazin. Sm.  $177^\circ$  (*B.* 37, 2278 *C.* 1904 [2] 434).
- 12) 3-Phenylazo-2-Phenylindol. Sm.  $166^\circ$  (*G.* 32 [2] 462 *C.* 1903 [1] 839).
- $C_{20}H_{16}O$  9) 2-oder-3-[ $\alpha$ -Oxybenzyl]fluoren. Sm.  $113^\circ$  (*M.* 24, 592 *C.* 1903 [2] 1276).
- 10) 4-Keto-3-Methyl-1-Diphenylmethylen-1,4-Dihydrobenzol. Sm.  $176^\circ$  (*B.* 36, 3562 *C.* 1903 [2] 1374).
- $C_{20}H_{16}O_2$  \*1)  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha\alpha\beta$ -Triphenyläthan (Phenylbenzoin). Sm.  $87^\circ$  (*Am.* 29, 597 *C.* 1903 [2] 196; *B.* 37, 2758 *C.* 1904 [2] 707).
- \*3) Triphenylelessigsäure. Sm.  $264^\circ$  (*B.* 36, 146 *C.* 1903 [1] 466).
- \*5) Triphenylmethan-4-Carbonsäure. Sm.  $162^\circ$  (*B.* 37, 662 *C.* 1904 [1] 952).
- \*8) Benzoat d. 4-Oxydiphenylmethan. Sm.  $87^\circ$  (*A.* 334, 373 *C.* 1904 [2] 1050).
- 10) Methyläther d. 9-Oxy-9-Phenylxanthen. Sm.  $96$ — $97^\circ$  (*B.* 37, 2934 *C.* 1904 [2] 1142).
- 11) Acetat d. 2-Oxy-1,4-Diphenylbenzol. Sm.  $144^\circ$  (*B.* 36, 1409 *C.* 1903 [1] 1358).
- 12) Verbindung (aus Benzylchlorid u. Phenol). Sm.  $86$ — $87^\circ$  (*G.* 33 [2] 458 *C.* 1904 [1] 654).
- $C_{20}H_{16}O_3$  \*5)  $\alpha$ -Oxytriphenylmethan-3-Carbonsäure. Sm.  $166$ — $167^\circ$  (*B.* 37, 3698 *C.* 1904 [2] 1501).
- \*6)  $\alpha$ -Oxytriphenylmethan-4-Carbonsäure. Sm.  $200^\circ$ . Ba -|-  $7H_2O$  (*B.* 37, 351 *C.* 1904 [2] 351).
- $C_{20}H_{16}O_4$  20) Diphenyloktendilakton. Sm.  $226$ — $227^\circ$  (*A.* 334, 140 *C.* 1904 [2] 890).
- 21) Dimethylester d. 2-Phenylnaphtalin-1,2-Dicarbonsäure. Sm.  $90^\circ$  (*A.* 335, 118 *C.* 1904 [2] 1132).
- 22) Äthylester d. 2-[1-Oxy-2-Naphtoyl]benzol-1-Carbonsäure. Sm.  $91^\circ$  (*B.* 36, 560 *C.* 1903 [1] 721).
- $C_{20}H_{16}O_5$  \*7) Monoäthylester d. Pulvinsäure (Äthylpulvinsäure) (*C.* 1903 [2] 121).
- 11) Methyläther d. Formononetin. Sm.  $156^\circ$  (*M.* 24, 146 *C.* 1903 [1] 1033).
- 12) Dibenzoylbernsteinsäureäthylesteranhydrid. Sm.  $198$ — $200^\circ$  u. Zers. (*A.* 293, 119). — \*II, 1187.
- $C_{20}H_{16}O_6$  20) Diacetat d. 1,7-Dioxy-2,6-Dimethyl-9,10-Anthrachinon. Sm.  $215^\circ$  (*Soe.* 83, 1332 *C.* 1904 [1] 100).
- 21) Triacetat d. 2,3,9-Trioxyanthracen. Sm.  $163$ — $164^\circ$  (*B.* 36, 2938 *C.* 1903 [2] 886).
- 22) Verbindung (aus  $\alpha\beta\gamma$ -Tri keto- $\alpha$ -Phenylbutan). Sm.  $202^\circ$  (*B.* 35, 3319 *C.* 1902 [2] 1110; *B.* 36, 3232 *C.* 1903 [2] 941).
- $C_{20}H_{16}O_7$  10) Tetramethyläther d. Tetraoxybrasanchinon. Sm.  $264^\circ$  (*B.* 36, 2205 *C.* 1903 [2] 382).

- $C_{20}H_{16}O_7$  11) Diacetat d. Emodinmonomethyläther. Sm. 157° (*See* 83, 133 C. 1904 [1] 100).
- $C_{20}H_{16}O_8$  9) Triacetat d. 2,3,7-Trioxo-9-Methylfluoron. Sm. 225—228° (*B.* 37, 2731 C. 1904 [2] 541).
- $C_{20}H_{16}N_2$  \*2) 1,4-Di[Benzyldenamido]benzol. Sm. 138—140° (*See* 85, 1176 C. 1904 [2] 1215).
- \*8) s-Di[2-Naphtyl]hydrazin. Sm. 140—141° (*B.* 36, 4161 C. 1904 [1] 286).
- 25) 2,2'-Diamido-1,1'-Binaphtyl. Sm. 191° (*B.* 30, 82; *B.* 36, 4159 C. 1904 [1] 286).
- 26) 2,4-Di[ $\beta$ -Phenyläthenyl]-1,3-Diazin. Sm. 145—146° (*B.* 36, 3385 C. 1903 [2] 1193).
- $C_{20}H_{16}N_4$  13) 3-Phenylamido-1,5-Diphenyl-1,2,4-Triazol. Sm. 202° (*Ann.* 29, 80 C. 1903 [1] 523; *Ann.* 32, 365 C. 1904 [2] 1507).
- 14) 1,4,5-Triphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Imid. Sm. 203° (*J. pr.* [2] 67, 232 C. 1903 [1] 1262).
- 15) 2-[2-Phenylhydrazonmethylphenyl]indazol. Sm. 191° u. Zers. (195°) (*C. r.* 187, 983 C. 1904 [1] 176; *Bl.* [3] 31, 872 C. 1904 [2] 661).
- $C_{20}H_{16}Br_2$  1) 1,4-Di[ $\alpha$ -Brombenzyl]benzol. Sm. 112,5° (*B.* 37, 1467 C. 1904 [1] 1342).
- $C_{20}H_{17}N$  7) 1,2-Diphenyl-3-[2-Pyridyl]-R-Trimethylen. Sm. 164°. HCl (*B.* 36, 118 C. 1903 [1] 469).
- 8) 5,7-Diphenyl-2,3-Dihydro-4-Isobenzazol (5,7-Diphenyl-2,3-Dihydro-pyriden). Sm. 145—146°. HCl, Pikrat (*B.* 35, 3975 C. 1903 [1] 37).
- $C_{20}H_{17}Cl$  2)  $\alpha$ -Chlor-2-Methyltriphenylmethan. Sm. 136—137° (*B.* 37, 1250 C. 1904 [1] 1355).
- 3)  $\alpha$ -Chlor-4-Methyltriphenylmethan. Sm. 99° (*B.* 37, 661 C. 1904 [1] 952; *B.* 37, 1631 C. 1904 [1] 1649).
- $C_{20}H_{18}O$  \*2)  $\alpha$ -Oxy-2-Methyltriphenylmethan? Sm. 150° (*B.* 37, 991 C. 1904 [1] 1215; *B.* 37, 1248 C. 1904 [1] 1354; *B.* 37, 3359 C. 1904 [2] 1127).
- \*6) Methyläther d. 4-Oxytriphenylmethan. Sm. 64—65° (*B.* 36, 2790 C. 1903 [2] 882).
- 7) 4-Oxy- $\alpha\alpha\alpha$ -Triphenyläthan. Sm. 119—120° (*B.* 36, 2794 C. 1903 [2] 883).
- 8)  $\alpha$ -Oxy- $\alpha\alpha\beta$ -Triphenyläthan. Sm. 88—89° (*B.* 37, 1430 C. 1904 [1] 1351; *B.* 37, 1455 C. 1904 [1] 1353).
- 9)  $\alpha$ -Oxy-2-Methyltriphenylmethan. Sm. 98° (*B.* 37, 993 C. 1904 [1] 1215; *B.* 37, 1248 C. 1904 [1] 1354).
- 10)  $\alpha$ -Oxy-3-Methyltriphenylmethan. Sm. 65° (67—68°); Sd. 240—245° (*B.* 37, 993 C. 1904 [1] 1215; *B.* 37, 1250 C. 1904 [1] 1355; *J.* 37, 3360 C. 1904 [2] 1126).
- 11)  $\alpha$ -Oxy-4-Methyltriphenylmethan. Sm. 72—73° (74°) (*B.* 37, 656, 663 C. 1904 [1] 951; *B.* 37, 992 C. 1904 [1] 1214).
- 12) 4-Oxy-3-Methyltriphenylmethan. Sm. 100° (*B.* 36, 3561 C. 1903 [2] 1374; *B.* 36, 3565 C. 1903 [2] 1375).
- 13) 4-Keto-6-Phenyl-2-[ $\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 105° (*C.* 1903 [2] 944).
- $C_{20}H_{18}O_2$  \*2)  $\alpha\beta$ -Dioxy- $\alpha\alpha\beta$ -Triphenyläthan. Sm. 168° (163—165°) (*B.* 36, 1577 C. 1903 [1] 1397; *B.* 36, 1953 C. 1903 [2] 276; *B.* 37, 2762 C. 1904 [2] 707).
- \*8) 4-Methyläther d.  $\alpha$ ,4-Dioxytriphenylmethan. Sm. 84° (*B.* 36, 2334 C. 1903 [2] 440; *B.* 36, 2789 C. 1903 [2] 882).
- 9)  $\alpha$ ,4-Dioxy-3-Methyltriphenylmethan. Sm. 107—108°. K (*B.* 36, 3558 C. 1903 [2] 1374).
- 10) isom.  $\alpha$ ,4-Dioxy-3-Methyltriphenylmethan. Sm. 148—149° (*B.* 36, 3566 C. 1903 [2] 1375).
- $C_{20}H_{18}O_3$  10) Anhydrid d. Phenylisocrotonsäure. Sm. 120—121° (*B.* 37, 2001 C. 1904 [2] 24).
- 11) Benzoat d. Pyroguajacin. Sm. 179° (*M.* 1, 599; 19, 99). — III, 645; \*III, 474.
- $C_{20}H_{18}O_4$  \*12) Methylester d. 3-Keto-2-Benzoyl-1-Phenyl-R-Pentamethylen-5-Carbonsäure. Sm. 115—116° (*A.* 326, 349 C. 1903 [1] 1124).
- 13) Methylester d. 4-Oxy-5-Benzoyl-1-Phenyl-2,3-Dihydro-R-Penten-2-Carbonsäure. Cu (*A.* 326, 351 C. 1903 [1] 1124).

- $C_{20}H_{18}O_6$  \*10)  $\beta$ -Tetramethyläther d. Dehydrobrasilin (T. d. Tetraoxybrasan). Sm. 158° (B. 36, 2198 C. 1903 [2] 381).  
 12)  $\gamma$ -Benzoylmethyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta\delta$ -Dicarbonsäure. Sm. 163° (C. 1903 [2] 944).  
 13) Diphenylketotolaktonsäure +  $3H_2O$ . Sm. 195—197° (wasserfrei). Ca +  $2\frac{1}{2}H_2O$  (A. 334, 133 C. 1904 [2] 889).  
 14) Isodiphenylketotolaktonsäure. Sm. 202—206°. Ca (A. 334, 138 C. 1904 [2] 890).  
 15) Säure (aus Diphenylketendilakton). Sm. 170—171° (A. 334, 142 C. 1904 [2] 890).
- $C_{20}H_{14}O_6$  14) Resinotannol (aus. Feroxaloe) (Ar. 241, 350 C. 1903 [2] 726).  
 15) Tetramethyläther d. Pentaoxybrasan. Sm. 218° (B. 36, 2204 C. 1903 [2] 382).  
 16) Tetramethyläther d. Pentaoxyrurinden (B. 36, 2203 C. 1903 [2] 382).  
 17) Dibenzoat d. Dulcid. Sm. 138° (C. r. 139, 638 C. 1904 [2] 1536).
- $C_{20}H_{18}O_7$  9) 3-Acetat d. 3,6-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron-2<sup>3</sup>,2<sup>4</sup>,6-Trimethyläther. Sm. 140—141° (B. 37, 780 C. 1904 [1] 1156).  
 10) 3-Acetat d. 3,5,7-Trioxy-2-[4-Oxyphenyl]-1,4-Benzpyron-2<sup>3</sup>,5,7-Trimethyläther. Sm. 190—191° (B. 37, 2098 C. 1904 [2] 121).  
 11) 3-Acetat d. 3,7,8-Trioxy-2-[2-Oxyphenyl]-1,4-Benzpyron-2<sup>3</sup>,7,8-Trimethyläther. Sm. 138—139° (B. 37, 2630 C. 1904 [2] 539).  
 12) 3-Acetat d. 3,7,8-Trioxy-2-[3-Oxyphenyl]-1,4-Benzpyron-2<sup>3</sup>,7,8-Trimethyläther. Sm. 165° (B. 37, 2633 C. 1904 [2] 540).
- $C_{20}H_{18}O_8$  15) Säure (aus Citronensäure u. Benzaldehyd). Sm. 143—144°. Ag<sub>3</sub> (M. 24, 84 C. 1903 [1] 769).
- $C_{20}H_{18}O_9$  7) Atranorsäure (C. 1903 [2] 120).
- $C_{20}H_{18}O_{10}$  5) Pentamethyläther d. Galloflavin. Sm. 235—237° (M. 25, 607 C. 1904 [2] 908).
- $C_{20}H_{18}N_3$  \*5)  $\alpha$ -Benzylimido- $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan. Sm. 99—100° (Soc. 83, 327 C. 1903 [1] 581, 877).  
 \*6)  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan. HCl, (2HCl, PtCl<sub>4</sub>, B. 36, 23 C. 1903 [1] 510).  
 \*10)  $\beta$ -Benzyliden- $\alpha$ -Phenyl- $\alpha$ -Benzylhydrazin. Sm. 111° (M. 25, 594 C. 1904 [2] 1293).  
 22)  $\alpha$ -Diphenylmethyl- $\beta$ -Benzylidenhydrazin. Sm. 85° u. Zers. (J. pr. [2] 67, 176 C. 1903 [1] 874).
- $C_{20}H_{18}N_4$  24)  $\beta$ -Phenylazo- $\beta$ -Phenylhydrazon- $\alpha$ -Phenyläthan. Sm. 127° (B. 36, 2486 C. 1903 [2] 490).
- $C_{20}H_{18}Br_4$  1)  $\alpha\delta\epsilon\theta$ -Tetrabrom- $\alpha\theta$ -Diphenyl- $\beta\zeta$ -Oktadien. Sm. 185° (A. 331, 166 C. 1904 [1] 1211).
- $C_{20}H_{18}Br_8$  1)  $\alpha\beta\gamma\delta\epsilon\zeta\eta\theta$ -Oktobrom- $\alpha\theta$ -Diphenylloktan. Sm. 248° (A. 331, 167 C. 1904 [1] 1211).
- $C_{20}H_{19}N$  6) 2-Methylamidotriphenylmethan. Sm. 130—132°. HCl (B. 37, 3206 C. 1904 [2] 1473).  
 7)  $\alpha$ -[4-Isopropylphenyl]- $\beta$ -[4-Chinolyl]äthen. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 36, 1671 C. 1903 [2] 49).
- $C_{20}H_{19}N_3$  11) Anhydrid d. 4,4',4''-Triamido- $\alpha$ -Oxy-3-Methyltriphenylmethan (B. 36, 4024 C. 1904 [1] 167).
- $C_{20}H_{19}Br_3$  1) Brombisdiphenylbutadiendibromid. Sm. 223° u. Zers. (B. 37, 2276 C. 1904 [2] 218).  
 2) Verbindung (aus Diphenylbutadien). Sm. 213—214° (203—204°) (B. 36, 4325 C. 1904 [1] 111; B. 37, 2 C. 1904 [2] 104).
- $C_{20}H_{20}O_2$  \*2) 2-Keto-1-[ $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropyl]-R-Pentamethylen. Sm. 78—80° (B. 35, 3973 C. 1903 [2] 104).
- $C_{20}H_{20}O_4$  \*13) Diphenylketotolaktonsäure. Sm. 179°. Ca, Ba, Ag (A. 334, 120 C. 1904 [2] 889).  
 30) 2<sup>3</sup>,2<sup>4</sup>-Diäthyläther d. 7-Oxy-4-Methylen-2-[2,4-Dioxyphenyl]-1,4-Benzpyran. Sm. 77—81°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, Pikrat (B. 37, 357 C. 1904 [1] 670).  
 31) Dibenzoat d. isom. 1,2-Dioxyhexahydrobenzol. Sm. 93,5° (C. r. 136, 385 C. 1903 [1] 711).
- $C_{20}H_{20}O_5$  \*6) Diphenylketotolaktonsäure. Sm. 132°. Ba, Ag<sub>2</sub> (A. 334, 126 C. 1904 [2] 889).

- $C_{20}H_{20}O_6$  15) Methyläther d. Verb.  $C_{18}H_{18}O_8$ . Sm. 82—83° (*M.* 25, 882 *C.* 1904 [2] 1313).  
 16) Oxysäure (aus Diphenylketotolaktonsäure). *Ca* (*A.* 334, 136 *C.* 1904 [2] 889).  
 17) Oxysäure (aus Isodiphenylketotolaktonsäure). *Ca* (*A.* 334, 140 *C.* 1904 [2] 890).  
 18)  $\gamma^2$ -Acetat d.  $\gamma$ -Keto- $\alpha$ -[2-Oxyphenyl]- $\gamma$ -[2,3,4-Trioxyphenyl]-propen- $\alpha^2, \gamma^3, \gamma^4$ -Trimethyläther. Sm. 88° (*B.* 37, 2629 *C.* 1904 [2] 539).  
 19)  $\gamma^2$ -Acetat d.  $\gamma$ -Keto- $\alpha$ -[3-Oxyphenyl]- $\gamma$ -[2,3,4-Trioxyphenyl]-propen- $\alpha^2, \gamma^3, \gamma^4$ -Trimethyläther. Sm. 88° (*B.* 37, 2632 *C.* 1904 [2] 539).  
 20)  $\gamma^6$ -Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphenyl]- $\gamma$ -[4-Oxyphenyl]-propen- $\alpha^4, \gamma^2, \gamma^4$ -Trimethyläther. Sm. 88° (*B.* 37, 2632 *C.* 1904 [1] 1158).
- $C_{20}H_{20}O_7$  \*5) Tetramethyläther d. Hämatoxylin (T. d. Hexaoxyrufindan) (*B.* 36, 2203 *C.* 1903 [2] 382).  
 8) Pentamethyläther d. Quercetin +  $H_2O$ . Sm. 148° (*Ar.* 242, 242 *C.* 1904 [1] 1652).  
 9) Verbindung (aus Hämatoxylin + tetramethyläther). Sm. 165—167° (*B.* 37, 632 *C.* 1904 [1] 955).
- $C_{20}H_{20}O_8$  6) Hexamethyläther d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm. 245° (*C.* 1904 [2] 709).
- $C_{20}H_{20}N_4$  3)  $\beta$ -Phenylhydrazon- $\beta$ -Phenylhydrazido- $\alpha$ -Phenyläthan. Sm. 127° (*B.* 36, 2486 *C.* 1903 [2] 490).  
 4) Phenylhydrazon d. Verb.  $C_{14}H_{14}ON_2$ . Sm. 227—228° (*Bl.* [3] 31, 452 *C.* 1904 [1] 1498).
- $C_{20}H_{21}N_3$  4)  $\alpha\alpha\alpha$ -Tri[ $\beta$ -Amidophenyl]äthan. Sm. 191—192° (*B.* 36, 474 *C.* 1903 [1] 638).
- $C_{20}H_{22}O_4$  \*10) Diäthylester d.  $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure. Sm. 71° (*B.* 37, 3219 *C.* 1904 [2] 1120).  
 16) 2<sup>2</sup>,2<sup>4</sup>-Diäthyläther d. 7-Oxy-4-Methyl-2-[2,4-Dioxyphenyl]-1,4-Benzopyran. Sm. 125—147° (*B.* 37, 361 *C.* 1904 [1] 671).  
 17) Diäthylester d.  $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. Sm. 100° (*B.* 37, 3216 *C.* 1904 [2] 1120).  
 18) Diphenylester d. para-Hexan- $\gamma\delta$ -Dicarbonsäure. Sm. 107—108° (*B.* 35, 4083 *C.* 1903 [1] 74).  
 19) Di[2,4-Dimethylphenylester] d. Bernsteinsäure. Sm. 70° (*B.* 35, 4080 *C.* 1903 [1] 74).  
 20) Di[2,5-Dimethylphenylester] d. Bernsteinsäure. Sm. 81° (*B.* 35, 4081 *C.* 1903 [1] 74).  
 21) Di[3,4-Dimethylphenylester] d. Bernsteinsäure. Sm. 110° (*B.* 35, 4080 *C.* 1903 [1] 74).  
 22) Dibenzolat d.  $\alpha\zeta$ -Dioxyhexan. Sm. 56° (*C. r.* 136, 245 *C.* 1903 [1] 583).
- $C_{20}H_{22}O_5$  \*9) Oxysäure (aus Diphenylketotolaktonsäure). *Ba*,  $Ag_2$  (*A.* 334, 123 *C.* 1904 [2] 889).
- $C_{20}H_{22}O_6$  \*5) Tetramethyläther d. Hämatoxylin. Sm. 142° (*B.* 36, 2202 *C.* 1903 [2] 382).  
 15) Dibenzyliden-1-Sorbit. Sm. 160° (*R.* 19, 8). — \*III, 6.  
 16) 4,4'-Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan- $\alpha\beta$ -Dimethyläther. Sm. 153° (*A.* 335, 174 *C.* 1904 [2] 1129).  
 17) 4,4'-Diacetat d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan- $\alpha\beta$ -Dimethyläther. Sm. 91° (*A.* 335, 175 *C.* 1904 [2] 1129).  
 18) Verbindung (aus Dihydroflavaspidsäure + antherin). Sm. 213—215° + Aceton (*A.* 329, 314 *C.* 1904 [1] 799).
- $C_{20}H_{22}O_8$  \*2) Populin (*C.* 1904 [2] 1405).
- $C_{20}H_{22}O_{10}$  \*1) Erythrin +  $H_2O$ . Sm. 137° (*Bl.* [3] 31, 611 *C.* 1904 [2] 99; *Bl.* [3] 31, 1098).
- $C_{20}H_{24}O_4$  9) Aethylester d. Benzoylcamphocarbonsäure. Sm. 46—47°; *Sd.* 218 bis 218,5° (*B.* 35, 4039 *C.* 1903 [1] 82).
- $C_{20}H_{24}O_7$  2) Olivil. Sm. 142,5° (*C.* 1903 [1] 920).  
 3) Isoolivil (*C.* 1903 [1] 921).

- $C_{20}H_{24}N_2$  \*2) Di[2,4,6-Trimethylbenzyliden]hydrazin. Sm. 167° (*C.* 1903 [1] 141).  
 \*4)  $\alpha\beta$ -Di[1,2,3,4-Tetrahydro-2-Isochinolyl]äthan. Sm. 95—96° (*B.* 36, 1167 *C.* 1903 [1] 1187; *B.* 36, 3800 *C.* 1904 [1] 21).  
 5)  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Isopropylphenyl]- $\alpha$ -Penten. Sm. 87,5° (*A.* 330, 258 *C.* 1904 [1] 946).  
 6)  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methyl- $\alpha$ -Buten. Sm. 106,5° (*A.* 330, 261 *C.* 1904 [1] 947).  
 7)  $\alpha\beta$ -Di[1,2,3,4-Tetrahydro-1-Chinolyl]äthan. Sm. 146—147° (*B.* 36, 3799 *C.* 1904 [1] 21).
- $C_{20}H_{28}O_4$  4) Dihydrobidurochinon (*B.* 29, 2184). — \*III, 273.  
 $C_{20}H_{26}O_8$  C 60,9 — H 6,6 — O 32,5 — M. G. 394.  
 1) Tetraacetat d. 2,3,5,6-Tetraoxy-1,4-Diisopropylbenzol. Sm. 245° (*B.* 37, 2390 *C.* 1904 [2] 308).
- $C_{20}H_{28}O_{10}$  2) Diäthylester d. Glyko-o-Cumarincarbonsäure. Sm. 152° (*C.* 1903 [1] 89).
- $C_{20}H_{26}N_2$  \*3)  $\alpha\gamma$ -Di[2,4-Dimethylphenylamido]- $\alpha$ -Buten (*A.* 329, 223 *C.* 1903 [2] 1428).  
 8)  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Isopropylphenyl]pentan. Sm. 135° (*A.* 330, 260 *C.* 1904 [1] 947).  
 9)  $\alpha$ -[2,4,6-Trimethylbenzyl]- $\beta$ -[2,4,6-Trimethylbenzyliden]hydrazin. Sm. 88—89° (*C.* 1903 [1] 142).
- $C_{20}H_{26}N_4$  9) 3,8-Di[Diäthylamido]diphenazin. Sm. 184° (*B.* 37, 34 *C.* 1904 [1] 524).
- $C_{20}H_{28}O_2$  \*1) Dicamphochinon (*B.* 37, 1569 *C.* 1904 [1] 1442).  
 \*2)  $\beta\beta$ -Dicamphanhexan-1,4-dion (Dicamphendion). Sm. 192—193° (*D.R.P.* 94498; *B.* 36, 2610 *C.* 1903 [2] 623).  
 5) Dicamphenhexadienperoxyd. Sm. 155—156° (*G.* 27 [1] 180). — \*III, 369.
- $C_{20}H_{28}O_4$  4) Laricopinonsäure. Sm. 97°. K, Ba, Pb, Ag (*Ar.* 241, 576 *C.* 1904 [1] 166).
- $C_{20}H_{28}O_6$  4) Methylester d. Diacetylsantolsäure. Sm. 151° (*B.* 37, 260 *C.* 1904 [1] 643).  
 C 60,6 — H 7,1 — O 32,3 — M. G. 396.
- $C_{20}H_{28}O_8$  1) Ciliansäure. Sm. 242°. Ba<sub>3</sub> (*M.* 24, 57 *C.* 1903 [1] 766).
- $C_{20}H_{28}O_{13}$  \*1) Amygdalinsäure (*B.* 35, 4161 *C.* 1903 [1] 124).
- $C_{20}H_{28}N_2$  \*1) 4,4'-Di[Diäthylamido]biphenyl. Sm. 86° (*B.* 37, 33 *C.* 1904 [1] 524).
- $C_{20}H_{30}O$  4) Abietoresen. Sm. 168—169° (*C.* 1900 [2] 862). — \*III, 426.  
 5) Verbindung (aus d. Aldehyd d. Camphenilansäure). Sm. 72° (*H.* 37, 198 *C.* 1903 [1] 595).
- $C_{20}H_{30}O_2$  \*1)  $\beta\beta$ -Dicampher. Sm. 163—164° (*B.* 36, 2611 *C.* 1903 [2] 623).  
 \*14) Metacopaivasäure (Gurjutarboresinol) (*Ar.* 241, 390 *C.* 1903 [2] 724).  
 \*15) d-Pimarsäure (*Soc.* 85, 1242 *C.* 1904 [2] 1308).  
 27) Isodicampher. Sm. 90—95°? (*G.* 27 [1] 167). — \*III, 370.  
 28) Beljibietinsäure. Sm. 153—154°. K, Pb, Ag (*Ar.* 240, 589 *C.* 1903 [1] 164).  
 29) Palabietinsäure. Sm. 153—154°. K, Pb, Ag (*Ar.* 240, 578 *C.* 1903 [1] 163).
- $C_{20}H_{32}O$  6) Verbindung (aus Erythroxyllomonogynum Roxb.). Sm. 117—118° (*C.* 1904 [1] 1265).
- $C_{20}H_{32}O_2$  \*4) Dicampherpinakon. Sm. 151° (*B.* 36, 2025 *C.* 1903 [2] 624).  
 9) Lepranthasäure. Sm. 111—112° (*A.* 336, 51 *C.* 1904 [2] 1325).  
 10) Verbindung (aus Campher). Sm. 160° (*B.* 35, 3912 *C.* 1903 [1] 29; *B.* 36, 2632 *C.* 1903 [2] 626).  
 11) Verbindung (aus Ficus elastica). Sm. 195° (*B.* 37, 3847 *C.* 1904 [2] 1613).
- $C_{20}H_{32}O_4$  10) Acetat-Methyläthylakrylat d. Glykol  $C_{12}H_{22}O_2$ . Sd. 225—232°<sub>11</sub> (*M.* 24, 162 *C.* 1903 [1] 957).
- $C_{20}H_{32}O_8$  2) Digitsäure (siehe auch  $C_{10}H_{16}O_4$ ). KH (*B.* 37, 1217 *C.* 1904 [1] 1363).  
 $C_{20}H_{32}O_{12}$  C 51,7 — H 6,9 — O 41,4 — M. G. 464.  
 1) Verbindung (aus Kautschuk) oder  $C_{30}H_{48}O_{15}$  (*B.* 37, 2709 *C.* 1904 [2] 528).
- $C_{20}H_{34}O$  12) Verbindung (aus Kö-Sam-Samen). Sm. 130—133° (*C.* 1903 [2] 893).
- $C_{20}H_{34}O_2$  12) Verbindung (aus Asclepias syriaca L.) (*J.pr.* [2] 68, 406 *C.* 1904 [1] 105).
- $C_{20}H_{34}O_4$  3) Monomenthylester d. Camphersäure. Zers. bei 310°. Na (*C.* 1903 [1] 162; *B.* 37, 1381 *C.* 1904 [1] 1442).

- $C_{20}H_{34}Cl_2$  1) Bisabelendihydrochlorid. Sm. 79,3° (*Ar.* 235, 296). — \*III, 404.  
 $C_{20}H_{34}S_2$  1) Dibornylidisulfid. Sm. 175—176° (*B.* 36, 867 *C.* 1903 [1] 972).  
 $C_{20}H_{36}O$  3) Cyklogallipharol. Sm. 46° (*Ar.* 242, 274 *C.* 1904 [1] 1654).  
 $C_{20}H_{38}O_2$  5) Aethylester d. Chaulmoograsäure. Sd. 230°<sub>20</sub> (*Soc.* 85, 854 *C.* 1904 [2] 348, 604).  
 $C_{20}H_{38}O_5$  3) isom. Ketoacetoxylstearinsäure. Fl. (*B.* 36, 2659 *C.* 1903 [2] 826).  
 $C_{20}H_{38}O_2$  5) Aethylester d.  $\alpha$ -Heptadeken- $\alpha$ -Carbonsäure. Sm. 15°; Sd. oberh. 300° (*G.* 34 [2] 84 *C.* 1904 [2] 694).  
 $C_{20}H_{38}O_3$  \*3) Aethylester d. Ricinolsäure. Sd. 258°<sub>13</sub> (*B.* 36, 784 *C.* 1903 [1] 823).  
\*7) Verbindung (aus Isovaleraldehyd). Sd. 260—290° (*B.* 36, 2063 *C.* 1903 [2] 357).  
 $C_{20}H_{40}O_2$  \*1) Arachinsäure (*M.* 23, 940 *C.* 1903 [1] 297).  
\*3) Aethylester d. Stearinsäure. Sd. 139°<sub>0</sub> (*B.* 36, 4340 *C.* 1904 [1] 433).  
8) Aethylester d.  $\lambda$ -Isostearinsäure. Fl. (*Ar.* 241, 19 *C.* 1903 [1] 698).  
9) Verbindung (aus d. Glykol  $C_{10}H_{22}O_2$ ). Sd. 267° u. Zers. (*M.* 24, 584 *C.* 1903 [2] 870).  
 $C_{20}H_{40}O_3$  3) Aethylester d.  $\alpha$ -Oxyheptadekan- $\alpha$ -Carbonsäure. Sm. 62—63° (*Soc.* 85, 831 *C.* 1904 [2] 509).

## — 20 III —

- $C_{20}H_8O_3Cl_4$  1) Tetrachlorfluoran (aus 3,4-Dichlor-1-Oxybenzol). Sm. 284—285° (D.R.P. 156333 *C.* 1904 [2] 1673).  
2) isom. Tetrachlorfluoran (Dichlorfluoresceinchlorid). Sm. 257° (D.R.P. 49057). — \*II, 1209.  
 $C_{20}H_8O_7Cl_4$  1) Tetrachlordioxyfluorescein. Ca, Ba, HCl (*B.* 36, 1076 *C.* 1903 [1] 1182).  
 $C_{20}H_8O_7Br_4$  1) Tetrabromdioxyfluorescein (*B.* 36, 1083 *C.* 1903 [1] 1183).  
2) Tetrabromphloroglucinphtalein (*B.* 36, 1073 *C.* 1903 [1] 1181).  
 $C_{20}H_8N_2Br_3$  1) Chinoxalin (aus Phenanthrenchinon u. 3,4,5-Tribrom-1,2-Diamidobenzol). Sm. noch nicht bei 250° (*Ann.* 30, 79 *C.* 1903 [2] 356).  
 $C_{20}H_{10}OS_2$  1) Verbindung (aus Phenanthrenchinon u. Thiophen) (*B.* 37, 3352 *C.* 1904 [2] 1058).  
 $C_{20}H_{10}O_3Cl_2$  \*1) Dichlorfluoran (aus 3-Chlor-1-Oxybenzol). Sm. 252° (D.R.P. 156333 *C.* 1904 [2] 1673).  
 $C_{20}H_{10}O_4N_4$  C 64,9 — H 2,7 — O 17,3 — N 15,1 — M. G. 370.  
1) 2,7-Dinitrophenanthrophenazin. Sm. 356° (*B.* 36, 3740 *C.* 1904 [1] 37).  
2) 4,5-Dinitrophenanthrophenazin. Sm. 262—264° (*B.* 36, 3748 *C.* 1904 [1] 38).  
 $C_{20}H_{10}O_4J_4$  \*1) Tetrajodphenolphtalein (D.R.P. 143596 *C.* 1903 [2] 403).  
 $C_{20}H_{10}O_4Cl_2$  1) Dichlordioxyfluorescein. Ba (*B.* 36, 1080 *C.* 1903 [1] 1182).  
 $C_{20}H_{10}O_7Br_2$  2) isom. Dibromdioxyfluorescein (*B.* 36, 1081 *C.* 1903 [1] 1182).  
 $C_{20}H_{10}N_2Br_2$  3) 2,7-Dibromphenanthrophenazin (aus 2,7-Dibrom-9,10-Phenanthrenchinon). Sm. 294—295° (*B.* 37, 3570 *C.* 1904 [2] 1402).  
 $C_{20}H_{11}O_2N_3$  3) 4-Nitrophenanthrophenazin. Sm. 217—218° (*B.* 36, 3736 *C.* 1904 [1] 36).  
 $C_{20}H_{11}O_5N$  2) 4,5-Imid d. 1-Benzoylnaphtalin-1<sup>2</sup>,4,5-Tricarbonsäure. Sm. oberh. 300° (*A.* 327, 101 *C.* 1903 [1] 1229).  
 $C_{20}H_{11}O_6Br$  1) 2',3-Lakton d. 1-Keto-3-Methoxyl-2-[2-Brom-2-Oxy-1,3-Diketo-2,3-Dihydro-2-Indenyl]-2,3-Dihydroinden-3-Carbonsäure. Sm. 198° (*B.* 35, 3964 *C.* 1903 [1] 33).  
 $C_{20}H_{11}O_7N$  C 63,7 — H 2,9 — O 29,7 — N 3,7 — M. G. 377.  
1)  $\beta$ -Nitrofluorescein (D.R.P. 139428 *C.* 1903 [1] 679).  
 $C_{20}H_{11}N_2Cl$  1) Phenazin (aus 9,10-Phenanthrenchinon u. 4-Chlor-1,2-Diamidobenzol). Sm. 246° (*B.* 36, 4028 *C.* 1904 [1] 294).  
 $C_{20}H_{11}N_2Br$  1) 2-Bromphenanthrophenazin (aus 2-Brom-9,10-Phenanthrenchinon). Sm. 252—254° (*B.* 37, 3560 *C.* 1904 [2] 1401).  
2) 3-Bromphenanthrophenazin (aus 3-Brom-9,10-Phenanthrenchinon). Sm. 249° (*B.* 37, 3572 *C.* 1904 [2] 1403).  
 $C_{20}H_{11}N_2Br_3$  1) 5,6,7-Tribrom-2,3-Diphenyl-1,4-Benzdiazin (*Ann.* 30, 79 *C.* 1903 [2] 356).  
 $C_{20}H_{12}ON_2$  6) 1,1'-Dinaphto-2,2'-Orthodiazinoxid. Sm. 247—248° u. Zers. (*B.* 36, 4164 *C.* 1904 [1] 286; *B.* 36, 4173 *C.* 1904 [1] 287).

- $C_{20}H_{12}O_3N_2$  3) 2-[4-Oxyphenylazo]-9,10-Anthrachinon. Sm. oberh. 290° u. Zers. (C. 1904 [1] 289).
- $C_{20}H_{12}O_4N_2$  3) 2-[2,4-Dioxyphenylazo]-9,10-Anthrachinon. Sm. 261—263° u. Zers. (C. 1904 [1] 289).
- $C_{20}H_{12}O_5N_6$  1) 1,4-Di[2,4-Dinitrobenzylidenamido]benzol. Sm. 252° (B. 37, 1871 C. 1904 [1] 1601).  
C 51,7 — H 2,6 — O 27,6 — N 18,1 — M. G. 464.
- $C_{20}H_{12}N_2S_2$  2) 2,2'-Diphenylbenzobithiazol (Dibenzonyl-2,5-Disulfhydro-p-Diamidobenzol). Sm. 232—234° (Soc. 83, 1207 C. 1903 [2] 1328).
- $C_{20}H_{12}N_3Cl_3$  1) 1,3,5-Tri[4-Chlorphenyl]-1,2,4-Triazol? Sm. 168—170° (J. pr. [2] 67, 500 C. 1903 [2] 251).
- $C_{20}H_{12}Cl_2S_2$  3) Di[4-Chlor-1-Naphtyl]disulfid. Sm. 121—122° (C. r. 138, 982 C. 1904 [1] 1413).
- $C_{20}H_{12}Br_2S_2$  1) Di[4-Brom-1-Naphtyl]disulfid. Sm. 131—132° (C. r. 138, 982 C. 1904 [1] 1413).
- $C_{20}H_{18}OCl$  1) 9-Chlor-10-Keto-9-Phenyl-9,10-Dihydroanthracen. Sm. 164° (168 bis 169°) (B. [3] 17, 876; B. 37, 3338 C. 1904 [2] 1056). — \*III, 199.
- $C_{20}H_{18}OBr$  1) 9-Brom-10-Keto-9-Phenyl-9,10-Dihydroanthracen. Sm. 145—147° (B. 37, 3338 C. 1904 [2] 1056).
- $C_{20}H_{18}O_2N$  \*7) 5-Phenylakridin-5<sup>2</sup>-Carbonsäure. Sm. 347° u. Zers. (B. 37, 1006 C. 1904 [1] 1276).
- $C_{20}H_{18}O_3N$  11)  $\alpha'$ -Phenylpyrophtalon. Sm. 263° (B. 36, 3919 C. 1904 [1] 98).  
7) Benzoat d. 5-Oxy-1-Phenylbenzoxazol. Sm. 118,5° (B. 35, 4201 C. 1903 [1] 146).  
8) Benzoat d. 3-Oxy-5-Keto-5,10-Dihydroakridin. Sm. 265° (C. 1904 [2] 720).
- $C_{20}H_{18}O_4N$  5) 4-Phenylamido-1,3-Dioxy-9,10-Anthrachinon (D.R.P. 145239 C. 1903 [2] 1100).  
6) 2-Phenylamido-1,4-Dioxy-9,10-Anthrachinon. Sm. 255—256° (D.R.P. 86150; D.R.P. 114199 C. 1900 [2] 884). — \*III, 305.
- $C_{20}H_{18}O_4N_3$  3) 3-Nitro-4,4'-Biphenylenamid d. Benzol-1,2-Dicarbonsäure. Sm. 225° (B. 37, 2882 C. 1904 [2] 594).
- $C_{20}H_{18}O_4N_5$  2) 1-Phenyl-3,4-Di[3-Nitrophenyl]-1,2,5-Triazol? Sm. 174—175° (B. 36, 97 C. 1903 [1] 453).  
C 69,2 — H 3,7 — O 23,1 — N 4,0 — M. G. 347.
- $C_{20}H_{18}O_5N$  1)  $\alpha$ -Oxim d. Hydrochinonphtalein. Sm. 268—269° (B. 36, 2962 C. 1903 [2] 1006).  
2)  $\beta$ -Oxim d. Hydrochinonphtalein + 5H<sub>2</sub>O (B. 36, 2963 C. 1903 [2] 1006).  
3)  $\gamma$ -Oxim d. Hydrochinonphtalein (B. 36, 2963 C. 1903 [2] 1007).
- $C_{20}H_{18}O_6N$  \*2) Dibenzot d. 4-Nitro-1,3-Dioxybenzol. Sm. 109° (A. 330, 106 C. 1904 [1] 1076).  
C 53,2 — H 2,9 — O 28,4 — N 15,5 — M. G. 451.
- $C_{20}H_{18}O_8N_5$  1) Di[3-Nitrophenylamid] d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 225 bis 230° u. Zers. (C. 1903 [2] 431).  
2) Di[4-Nitrophenylamid] d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 197 bis 200° u. Zers. (C. 1903 [2] 431).
- $C_{20}H_{18}N_3Br_2$  2) 4,4'-Dibrom-1'-Amido-1,2'-Azonaphtalin. Sm. 181—182° (Soc. 85, 751 C. 1904 [2] 448).
- $C_{20}H_{14}ON_2$  \*11) 6-Oxy-2,3-Diphenyl-1,4-Benzdiazin. Sm. 251—252° (B. 37, 2280 C. 1904 [2] 434).  
13) isom. p-Nitroso-1,1'-Dinaphtylamin. Sm. 143° (B. 36, 4138 C. 1904 [1] 185).  
14) 2,2'-Azoxynaphtalin. Sm. 167—168° (B. 36, 4163 C. 1904 [1] 286; B. 36, 4173 C. 1904 [1] 288).  
15)  $\alpha'$ -Phenylpyrophtalin. Sm. oberh. 307° (B. 36, 3922 C. 1904 [1] 98).  
16) Verbindung (aus Isopyrophtalon u. Anilin). Sm. 185° (B. 36, 1662 C. 1903 [2] 40).
- $C_{20}H_{14}O_2N_2$  18) 4,4'-Biphenylenamid d. Benzol-1,2-Dicarbonsäure. Sm. oberh. 300° (B. 37, 2882 C. 1904 [2] 594).
- $C_{20}H_{14}O_4N_2$  7) Phenyl-3-Nitrobenzoylamid d. Benzolcarbonsäure. Sm. 139° (Am. 30, 37 C. 1903 [2] 363).
- $C_{20}H_{14}O_4N_4$  9) 1,4-Di[2-Nitrobenzylidenamido]benzol. Sm. 208° (B. 37, 1871 C. 1904 [1] 1601).

- $C_{20}H_{14}O_4N_4$  10) Benzoat d.  $\alpha$ -Oximido- $\alpha$ -Phenylazo- $\alpha$ -[3-Nitrophenyl]methan. Zers. bei 145° (*B.* 36, 73 *C.* 1903 [1] 452).
- $C_{20}H_{14}O_4Cl_8$  1) Dimethylester d. 1,3-Dichlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure. Sm. 215° (*B.* 37, 220 *C.* 1904 [1] 588).  
2) Dimethylester d. isom. 1,3-Dichlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (D. d. Hexachlor- $\gamma$ -Truxillsäure). Sm. 180—182° (*B.* 37, 223 *C.* 1904 [1] 588).
- $C_{20}H_{14}O_6N_4$  2) Verbindung (aus 1,3-Dinitrobenzol u. Aceton) (*B.* 37, 836 *C.* 1904 [1] 1201).
- $C_{20}H_{14}N_8Cl$  1) 1-[2-Chlorphenyl]-3,5-Diphenyl-1,2,4-Triazol. Sm. 108° (*J. pr.* [2] 67, 493 *C.* 1903 [2] 251).  
2) 1-[3-Chlorphenyl]-3,5-Diphenyl-1,2,4-Triazol. Sm. 107—109° (*J. pr.* [2] 67, 495 *C.* 1903 [2] 251).  
3) 1-[4-Chlorphenyl]-3,5-Diphenyl-1,2,4-Triazol. Sm. 119° (*J. pr.* [2] 67, 499 *C.* 1903 [2] 251).
- $C_{20}H_{15}ON_3$  15) 4-Nitroso-1,3-Dibenzylidenamidobenzol. Sm. 240° u. Zers. (*B.* 37, 2280 *C.* 1904 [2] 434).  
16) Phenylhydrazon d. Isopyrophtalon + 2H<sub>2</sub>O. Sm. 127° (*B.* 36, 1662 *C.* 1903 [2] 40).  
17) 5-Keto-1,3,4-Triphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 215—216° (217—218°) (*B.* 36, 1360 *C.* 1903 [1] 1340; *Am.* 31, 584 *C.* 1904 [2] 109).
- $C_{20}H_{15}O_2N$  \*1) 2-Benzoylamidodiphenylketon (*C.* 1903 [1] 924).  
\*2) 4-Benzoylamidodiphenylketon (*C.* 1903 [1] 924).  
\*9) Phenylimid d. Benzolcarbonsäure. Sm. 164° (*C.* 1903 [1] 924; *C. r.* 137, 713 *C.* 1903 [2] 1428).
- $C_{20}H_{15}O_2N$  13) o,p-Dimethylchinophtalon. Sm. 290° (*B.* 37, 3017 *C.* 1904 [2] 1409).  
14) o,p-Dimethylisochinophtalon. Sm. 231° (*B.* 37, 3017 *C.* 1904 [2] 1409).  
15) Benzoat d. 4-Benzylidenamido-1-Oxybenzol. Sm. 148° (*B.* 36, 4152 *C.* 1904 [1] 187).  
16) Benzoat d.  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthen. Sm. 90—91°. HCl, Pikrat (*B.* 36, 124 *C.* 1903 [1] 470).
- $C_{20}H_{15}O_2N_3$  9) 3-Phenylimidomethylazobenzol-3'-Carbonsäure. Sm. 128° (*B.* 36, 3474 *C.* 1903 [2] 1270).  
10) Benzoat d.  $\alpha$ -Oximido- $\alpha$ -Phenylazo- $\alpha$ -Phenylmethan. Sm. 126 bis 126,5° (*B.* 36, 65 *C.* 1903 [1] 451).
- $C_{20}H_{15}O_2P$  \*1) Di[1-Naphtyl]phosphinsäure. Sm. 220° (*C. r.* 139, 675 *C.* 1904 [2] 1638).
- $C_{20}H_{15}O_3N$  \*5) Benzoat d. 2-Benzoylamido-1-Oxybenzol. Sm. 183—184,5° (*B.* 36, 2051 *C.* 1903 [2] 353).  
\*7) Benzoat d. 4-Benzoylamido-1-Oxybenzol. Sm. 231° (*B.* 37, 3941 *C.* 1904 [2] 1597).  
16) 1-Benzoat d. 4-Hydroxylamido-1-Oxybenzol-4-Benzylidenäther. Sm. 205° (*B.* 36, 4151 *C.* 1904 [1] 187).  
17) Phenylamid d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 180° (*C.* 34 [1] 271 *C.* 1904 [1] 1409).
- $C_{20}H_{15}O_3N_3$  9) Phenylamid d. 4-Benzoylamido-1-Oxybenzol-4-Benzylidenäther. Sm. 168—169° u. Zers. (*A.* 334, 1901 [2] 1901).
- $C_{20}H_{15}O_4N$  7) Diacetat d. Dihydronaphtophenoxazon. Sm. 206° (*B.* 36, 1809 *C.* 1903 [2] 206).
- $C_{20}H_{15}O_4N_3$  6) p-Dinitro-1,2-Diphenyl-3-[2-Pyridyl]-R-Trimethylen. Sm. 112° (*B.* 36, 119 *C.* 1903 [1] 469).  
7) Di[Phenylamid] d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 211 bis 212° u. Zers. (*C.* 1903 [2] 431; *B.* 37, 2610 *C.* 1904 [2] 522).
- $C_{20}H_{15}O_4Cl_8$  1) Dimethylester d. 1-Chlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure. Sm. 170° (*B.* 37, 222 *C.* 1904 [1] 588).
- $C_{20}H_{15}O_5N_3$  5) 3'-Nitro-4'-Amido-4-Benzoylamidobenzol-4"-Carbonsäure. Sm. 140° (*B.* 37, 2883 *C.* 1904 [2] 1904).
- $C_{20}H_{15}O_6N_3$  C 61,1 — H 3,8 — O 24,4 — N 10,7 — M. G. 393.  
1)  $\alpha\alpha\alpha$ -Tri[p-Nitrophenyl]äthan. Sm. 200—202° (*B.* 36, 474 *C.* 1903 [1] 638).

- $C_{20}H_{15}O_6N_5$  C 56,9 — H 3,6 — O 22,8 — N 16,6 — M. G. 421.  
 1)  $\alpha$ -Phenyl- $\alpha$ -Benzyl- $\beta$ -[2,4,6-Trinitrobenzyliden]hydrazin. Sm. 161° (B. 36, 961 C. 1903 [1] 969).
- $C_{20}H_{15}NSe$  1) Benzyläther d. 5-Selenoakridin. Sm. 110°. (2HCl, PtCl<sub>4</sub>), Pikrat (J. pr. [2] 68, 90 C. 1903 [2] 446).
- $C_{20}H_{15}N_3S$  \*2) 1,4,5-Triphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 314 bis 315° (J. pr. [2] 67, 219 C. 1903 [1] 1260).
- $C_{20}H_{15}N_4Cl$  1) 3-[3-Chlorphenyl]amido-1,5-Diphenyl-1,2,4-Triazol. Sm. 195 bis 196° (Am. 32, 366 C. 1904 [2] 1507).
- $C_{20}H_{16}ON_2$  11)  $\alpha$ -Imido- $\alpha$ -Phenylbenzoylamido- $\alpha$ -Phenylmethan. Sm. 95—97° (C. 1903 [2] 831).  
 12) 2-[ $\alpha$ -Phenylhydrazonäthyl]- $\beta$ -Naphtofuran. Sm. 189° (B. 36, 2867 C. 1903 [2] 832).  
 13) N-Methyl-o-Methylchinophtalin. Sm. 205° (B. 36, 3919 C. 1904 [1] 98).
- $C_{20}H_{16}OS_8$  1) Dimethyläther d. 3,5-Dimerkapto-4-Thiocarbonyl-1-Keto-2,6-Diphenyl-1,4-Dihydrobenzol. Sm. 167° (B. 37, 1607 C. 1904 [1] 1444).
- $C_{20}H_{16}O_2N_2$  \*28) Di[Phenylamid] d. Benzol-1,2-Dicarbonsäure. Sm. 245—250° u. Zers. (Am. 26, 456; R. 21, 339 C. 1903 [1] 156).  
 34) Benzoat d.  $\alpha$ -Phenyl- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 148—149° (B. 37, 3938 C. 1904 [2] 1596).  
 35) Benzoat d.  $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin. Sm. 176—177° (B. 37, 3939 C. 1904 [2] 1597).
- $C_{20}H_{16}O_2N_4$  7) 3,4-Methylenäther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylazo- $\alpha$ -[3,4-Dioxyphenyl]methan. Sm. 156° (C. 1903 [2] 427).  
 8) trans- $\gamma$ -Phenylhydrazon- $\alpha$ -[2-Nitrophenyl]- $\gamma$ -[2-Pyridyl]propen. Sm. 137° (B. 35, 4066 C. 1903 [1] 92).
- $C_{20}H_{16}O_2S_2$  3) Dibenzyläther d. 2,5-Dimerkapto-1,4-Benzochinon. Sm. 223 bis 224° (A. 336, 152 C. 1904 [2] 1300).
- $C_{20}H_{16}O_8N_2$  11) 3,4-Di[Benzoylamido]-1-Oxybenzol. Sm. 203—205° (B. 36, 4126 C. 1904 [1] 273).
- $C_{20}H_{16}O_4N_2$  \*6) Cotoinazobenzol. Sm. 183—184° (A. 329, 278 C. 1904 [1] 795).  
 19) Diacetylbiindoxyl (C. 1903 [1] 35).
- $C_{20}H_{16}O_4N_4$  3) p p'-Di[Acetylamido]indigo (M. 24, 10 C. 1903 [1] 775).  
 4) 2,6-Diphenylazo-3,5-Dioxy-1-Methylbenzol-4-Carbonsäure (B. 37, 1413 C. 1904 [1] 1417).
- $C_{20}H_{16}O_6N_2$  6) Diacetylisatid. Sm. 198° (B. 37, 945 C. 1904 [1] 1217).
- $C_{20}H_{16}N_2S$  2)  $\alpha$ -Rhodan-4-Amidotriphenylmethan. HCl (B. 37, 602 C. 1904 [1] 886).
- $C_{20}H_{16}N_4S$  4) 4-Phenylamido-1,5-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Disulfid. Sm. 132° (J. pr. [2] 67, 236 C. 1903 [1] 1262).
- $C_{20}H_{17}ON$  \*6) Methyloxyhydrat d. 5-Phenylakridin. Sm. 140°. Methylsulfat, 4-Methylbenzolsulfonat (A. 327, 118, 122 C. 1903 [1] 1214, 1221; C. 1904 [2] 995).  
 \*11) Phenylbenzylamid d. Benzolcarbonsäure (B. 37, 2816 C. 1904 [2] 649).  
 \*15) 5-Oxy-10-Methyl-5-Phenyl-5,10-Dihydroakridin. Pikrat (B. 37, 576 C. 1904 [1] 897).  
 19) 4-Methylphenylamidodiphenylketon. Sm. 82° (D.R.P. 41751). — \*III, 147.  
 20) Verbindung (aus  $\alpha'$ -Phenylpyrophthalon). Sm. 135° (B. 36, 3921 C. 1904 [1] 98).
- $C_{20}H_{17}ON_3$  10)  $\alpha$ -Benzylidenamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 173° (B. 36, 1360 C. 1903 [1] 1340).  
 11)  $\alpha$ -Diphenylmethylenamido- $\beta$ -Phenylharnstoff. Sm. 163° (B. 37, 3181 C. 1904 [2] 991).  
 12)  $\alpha$ -Nitroso- $\alpha$ -Diphenylmethyl- $\beta$ -Benzylidenhydrazin. Sm. 96° u. Zers. (J. pr. [2] 67, 164 C. 1903 [1] 873).  
 13) Diphenylmethylenhydrazid d. 2-Amidobenzol-1-Carbonsäure. Sm. 157° (J. pr. [2] 69, 99 C. 1904 [1] 730).
- $C_{20}H_{17}ON_5$  4)  $\alpha$ -Phenylazomethylenamido- $\alpha\beta$ -Diphenylharnstoff (Carbanilidoformazylwasserstoff). Sm. 178° u. Zers. (B. 36, 1364 C. 1903 [1] 1341).  
 5) Benzylidenhydrazid d. 6-Benzylidenhydrazidopyridin-3-Carbonsäure. Sm. 313° (B. 36, 1112 C. 1903 [1] 1184).

- $C_{20}H_{17}OCl$  1) Methyläther d.  $\alpha$ -Chlor-4-Oxytriphenylmethan. Sm. 122—123° (124°) (B. 36, 2335 C. 1903 [2] 441; B. 36, 2789 C. 1903 [2] 882).
- $C_{20}H_{17}O_2N$  14) 2-Acetyl-1-Phenyl-1,3-Dihydro-4,2- $\beta$ -Naphthisoxazin. Sm. 142° (G. 33 [1] 30 C. 1903 [1] 926).
- $C_{20}H_{17}O_2N_3$  15) Verbindung (aus Acetophenon, Benzoylchlorid u. Pyridin). Sm. 110°; Zers. oberh. 230° (B. 36, 3676 C. 1903 [2] 1442).
- 15)  $\alpha$ -Nitroso- $\alpha$ -Diphenylmethyl- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 100° u. Zers. (J. pr. [2] 67, 164 C. 1903 [1] 873).
- 16) Benzoat d. 4-Oxy-1-[2-Methylphenylamido]diazobenzol. Sm. 131 bis 132° (B. 36, 4148 C. 1904 [1] 186).
- 17) Benzoat d. 4-Oxy-1-[4-Methylphenylamido]diazobenzol. Sm. 148,5° (B. 36, 4147 C. 1904 [1] 186).
- $C_{20}H_{17}O_2N_5$  \*2) Rubazonsäure. Sm. 181° (C. r. 139, 135 C. 1904 [2] 588).
- $C_{20}H_{17}O_5N_3$  \*8) Phenylamidoformiat d. 4-Oxy-s-Diphenylharnstoff. Sm. 238 bis 239° (J. pr. [2] 67, 340 C. 1903 [1] 1339).
- 10) Benzoat d.  $\beta$ -[4-Oxyphenyl]amido- $\alpha$ -Phenylharnstoff. Sm. 203 bis 204° (A. 334, 189 C. 1904 [2] 835).
- $C_{20}H_{17}O_4N$  \*1) Berberin.  $HNO_3$  (Soc. 83, 619 C. 1903 [1] 1364; C. 1903 [2] 1011).
- 13) Verbindung (aus Cotarnin u. Vanillin).  $HCl + H_2O$  (B. 37, 1963 C. 1904 [2] 44).
- $C_{20}H_{17}O_5N$  \*1) Protopin (Ar. 241, 319 C. 1903 [2] 1284).
- $C_{20}H_{17}O_6Cl_3$  1) Verbindung (aus Zimmtsäure u. Trichloressigsäure) (R. 21, 353 C. 1903 [1] 150).
- $C_{20}H_{17}O_7N_3$  \*1) Verbindung (aus d. Methylenäther d. 3,4-Dioxyphenylisonitrosodimethylketon) (A. 332, 332 C. 1904 [2] 652).
- $C_{20}H_{17}NS$  2) 4'-Benzylidenamido-4-Methyldiphenylsulfid. Sm. 99° (J. pr. [2] 68, 272 C. 1903 [2] 993).
- $C_{20}H_{17}N_2Cl$  4)  $\alpha$ -Chlor- $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -Diphenylamidomethan. Sm. 105 bis 107°; Sd. 240—250°<sub>30</sub> (B. 37, 966 C. 1904 [1] 1002).
- $C_{20}H_{18}ON_2$  \*4) 2-Benzoylamido-1-Phenylamidomethylbenzol (B. 37, 3118 C. 1904 [2] 1317).
- \*6)  $\alpha\alpha$ -Diphenyl- $\beta$ -[4-Methylphenyl]harnstoff (B. 37, 965 C. 1904 [1] 1002).
- 26)  $\alpha$ -Phenylhydroxylamido- $\alpha$ -Benzylimido- $\alpha$ -Phenylmethan. Fl.  $HCl$  (B. 36, 20 C. 1903 [1] 510).
- 27)  $\alpha$ -Phenylhydroxylamido- $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -Phenylmethan. Sm. 191°.  $HCl$  (B. 36, 21 C. 1903 [1] 510).
- 28)  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -Phenylimido- $\alpha$ -Phenylmethan. Sm. 191°.  $HCl$  (B. 36, 20 C. 1903 [1] 510).
- 29) Verbindung (aus d. Säure  $C_{21}H_{18}O_8N_2$ ). Sm. 217—218° (B. 36, 2126 C. 1903 [2] 365).
- $C_{20}H_{18}ON_4$  13)  $\alpha$ -Benzylidenamido- $\beta$ -Phenylamido- $\alpha$ -Phenylharnstoff. Sm. 206 bis 207° (B. 36, 1361 C. 1903 [1] 1340).
- 14)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylureido- $\alpha$ -Phenylmethan. Sm. 168° u. Zers. (B. 36, 2485 C. 1903 [2] 490).
- $C_{20}H_{18}O_2N_2$  20) 3,5,3',5'-Tetramethylindigo (D.R.P. 61711). — \*II, 969.
- $C_{20}H_{18}O_2N_4$  17)  $\alpha$ -Phenyl- $\alpha$ -Benzyl- $\beta$ -[4-Nitro-2-Amidobenzyliden]hydrazin. Sm. 155° (B. 37, 1863 C. 1904 [1] 1600).
- 18) 4,6-Di[Phenylazo]-3,5-Dioxy-1,2-Dimethylbenzol. Sm. 229° u. Zers. + Eisessig (A. 329, 307 C. 1904 [1] 794).
- $C_{20}H_{18}O_2N_6$  C 64,2 — H 4,8 — O 8,6 — N 22,4 — M. G. 374.
- 1) 1,4-Di[ $\beta$ -Phenylsemicarbazol]-1,4-Dihydrobenzol. Zers. bei 249° (A. 334, 168, 171 C. 1904 [2] 834).
- $C_{20}H_{18}O_2S_2$  1) 2,5-Dibenzyläther d. 2,5-Dimerkapto-1,4-Dioxybenzol. Sm. 134 bis 135° (A. 336, 153 C. 1904 [2] 1300).
- $C_{20}H_{18}O_3N_3$  3) Felicinsäuredisazobenzol. Sm. 209° (A. 329, 298 C. 1904 [1] 797).
- $C_{20}H_{18}O_3N_4$  \*6) 2-Methyläther d. 2,4,6-Trioxy-3,5-Diphenylazo-1-Methylbenzol. Sm. 204° (A. 329, 285 C. 1904 [1] 796).
- $C_{20}H_{18}O_4N_4$  \*4)  $\alpha$ -Phenyl- $\alpha$ - $\beta$ -Di[2-Nitrobenzyl]hydrazin (oder  $C_{20}H_{18}O_4N_4$ ) (M. 25, 602 C. 1904 [2] 1294).
- 5) Dibenzoylderivat d. Bisdiazaoacetone. Sm. 170° (G. 34 [1] 205 C. 1904 [1] 1485).
- $C_{20}H_{18}O_4N_6$  C 59,1 — H 4,4 — O 15,8 — N 20,7 — M. G. 406.
- 1)  $\alpha\gamma$ -Disemicarbazol- $\beta$ -Phthalyl- $\alpha$ -Phenylbutan. Sm. 252° (B. 37, 582 C. 1904 [1] 940).

- $C_{20}H_{18}O_4Br_2$  2) Dimethylester d. 1,3-Di[4-Bromphenyl]-R-Tetramethylen-2,4-Dicarbonsäure. Sm. 172° (*B.* 37, 219 *C.* 1904 [1] 588).
- 3) Dimethylester d. isom. 1,3-Di[4-Bromphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (D. d. Dibrom- $\gamma$ -Truxillsäure). Sm. 163° (*B.* 37, 223 *C.* 1904 [1] 588).
- $C_{20}H_{18}O_4S$  1) Sulfid d.  $\beta$ -Merkapto- $\alpha\gamma$ -Diketo- $\alpha$ -Phenylbutan (Thiobenzoylacetone). Sm. 95°.  $NH_4$ ,  $Na$ ,  $Fe$ ,  $Cu$  (*Bl.* [3] 29, 528 *C.* 1903 [2] 243).
- 2) 4-Oxytriphenylmethan-4-Methyläther- $\alpha$ -Sulfonsäure.  $Na + 5H_2O$  (*B.* 36, 2790 *C.* 1903 [2] 882).
- $C_{20}H_{18}O_4S_2$  3)  $\alpha$ -Phenylsulfon- $\alpha$ -Benzylsulfon- $\alpha$ -Phenylmethan. Sm. 173—174° (*B.* 36, 301 *C.* 1903 [1] 500).
- $C_{20}H_{18}O_5N_2$  2) Nitro cusparin (*C.* 1903 [2] 1011).
- 3) Anthranilopapaverin. Sm. 244—245° (*B.* 37, 1937 *C.* 1904 [2] 129).
- $C_{20}H_{18}O_6N_2$  4) Bisnitrosobenzoylacetone. Sm. 65° u. Zers. (*B.* 37, 1535 *C.* 1904 [1] 1609).
- 5) Tetramethyläther d. Tetraoxyindigo. subl. oberh. 300° (*B.* 36, 2932 *C.* 1903 [2] 888).
- 6)  $\alpha\beta$ -Di[2-Acetylamidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (*A.* 332, 276 *C.* 1904 [2] 701).
- $C_{20}H_{18}O_6Cl_4$  1) 4,4'-Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan- $\alpha\beta$ -Dimethyläther. Sm. 164° (*A.* 325, 57 *C.* 1903 [1] 462).
- $C_{20}H_{18}O_7N_2$  5) Tetramethyläther d. 6,7-Dioxy-1-[6-Nitro-3,4-Dioxybenzoyl]-isochinolin (Nitropapaveraldin). Sm. 199—200° (*B.* 37, 1936 *C.* 1904 [2] 129).
- $C_{20}H_{18}O_7N_4$  C 56,3 — H 4,2 — O 26,3 — N 13,1 — M. G. 426.
- 1) 2-Acetyläthylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 77—78° (*Soc.* 83, 1339 *C.* 1904 [1] 99).
- $C_{20}H_{18}N_2J_2$  3) Phenyl-2,3'-Dimethylazobenzol-4'-Jodoniumjodid. Zers. bei 143° (*J. pr.* [2] 69, 325 *C.* 1904 [2] 35).
- $C_{20}H_{19}ON$  5)  $\alpha$ -Oxy-4-Methylamidotriphenylmethan (*B.* 37, 2858 *C.* 1904 [2] 775).
- 6) 2-Oxy-1-[ $\alpha$ -Isopropylidenamidobenzyl]naphtalin. Sm. 124° (*G.* 33 [1] 33 *C.* 1903 [1] 926).
- 7) Phenyläther d. Dibenzylhydroxylamin. Sm. 125—126° (*G.* 33 [2] 459 *C.* 1904 [1] 655).
- $C_{20}H_{19}ON_3$  10) Phenylamid d. Di[Phenylamido]essigsäure. Sm. 141—142° (*A.* 332, 262 *C.* 1904 [2] 699).
- $C_{20}H_{19}ON_5$  3) 4-[4-(Methyl- $\alpha$ -Cyanäthylamido)phenylimido]-5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 190° (*B.* 36, 760 *C.* 1903 [1] 962).
- $C_{20}H_{19}O_2N$  8) Di[ $\beta$ -Keto- $\alpha$ -Benzylidenpropyl]amin.  $HCl$  (*Soc.* 83, 379 *C.* 1903 [1] 845, 1144).
- 9) 6-Phenylimido-4-Keto-5-Acetyl-2-Phenylhexahydrobenzol. Sm. 124—125° (*B.* 37, 3383 *C.* 1904 [2] 1219).
- 10) Verbindung (aus  $\beta$ -Naphtholbenzalamine). Sm. 103° (*G.* 33 [1] 28 *C.* 1903 [1] 926).
- $C_{20}H_{19}O_3N$  \*1) Cusparin (*C.* 1903 [2] 1010).
- 8) 4-Acetyl-amido-1-[2,5-Dimethylbenzoyl]-2-Methylbenzfuran. Sm. 200—205° u. Zers. (*B.* 36, 1262 *C.* 1903 [1] 1184).
- $C_{20}H_{19}O_4N$  \*1) Aethylester d. 4,5-Diketo-2-Phenyl-1-[4-Methylphenyl]tetrahydropyrrrol-3-Carbonsäure. Sm. 159° (*C. r.* 139, 212 *C.* 1904 [2] 656).
- 4) Anhydrocotarnineumaron. Sm. 66—71° ( $2HCl$ ,  $PtCl_4$ ) (*B.* 37, 2742 *C.* 1904 [2] 544).
- 5) Monooxim d. 3-Keto-2-Benzoyl-1-Phenyl-R-Pentamethylen-5-Carbonsäuremethylester. Sm. 184—185° (*A.* 326, 371 *C.* 1903 [1] 1125).
- $C_{20}H_{19}O_4N_3$  2) Diazopapaverin. Sm. 281° (*B.* 37, 1934 *C.* 1904 [2] 129).
- 3) Monosemicarbazone d. 3-Keto-2-Benzoyl-1-Phenyl-R-Pentamethylen-5-Carbonsäure. Sm. 236—237° u. Zers.  $Ag$  (*A.* 326, 378 *C.* 1903 [1] 1126).
- $C_{20}H_{19}O_4N_5$  C 61,1 — H 4,8 — O 16,3 — N 17,8 — M. G. 393.
- 1) 3,4-Dinitro-4'-Amido-4'-Dimethylamidotriphenylmethan. Sm. 209° (*J. pr.* [2] 69, 239 *C.* 1904 [1] 1268).
- $C_{20}H_{19}O_5N$  \*1) Papaveraldin. Sm. 210° (*B.* 37, 1936 *C.* 1904 [2] 129).
- \*3) Chelidonin (*C.* 1904 [1] 1224).
- \*4) Protopin. Sm. 204—205° (*C.* 1903 [1] 1142).

- $C_{20}H_{19}O_5N$  8) 2',2'-Diäthyläther d. 8-Nitroso-7-Oxy-4-Methylen-2-[2,4-Dioxyphenyl]-1,4-Benzpyran. Sm. 170–178° (B. 37, 360 C. 1904 [1] 671).
- $C_{20}H_{19}O_5N_3$  2) Aethylester d.  $\alpha$ -Phenylazo-4-Acetylamidobenzoylbrenztraubensäure. Sm. 123–124° (B. 36, 2698 C. 1903 [2] 952).
- $C_{20}H_{19}O_6N_3$  2) Diazopapaveraldin. Sulfat (B. 37, 1939 C. 1904 [2] 129).
- $C_{20}H_{19}N_3S$  3)  $\beta$ -Diphenylmethylenamido- $\alpha$ -Phenylthioharnstoff (Benzhydrylphenylthiosemicarbazid). Sm. 163–164° (J. pr. [2] 67, 171 C. 1903 [1] 874).
- $C_{20}H_{20}ON_2$  13) Methyläther d.  $\alpha$ -Oxy-4,4'-Diamidotriphenylmethan. Sm. 161 bis 163° (B. 37, 2863 C. 1904 [2] 776).
- 14) 4-Dimethylamidophenyl-4-Methylamido-1-Naphtylketon. Sm. 212° (D.R.P. 84655; C. 1903 [1] 87; B. 37, 1902 C. 1904 [2] 115). — \*III, 194.
- $C_{20}H_{20}O_2N_2$  7) 4,6-Dioxy-1,3-Di[4-Amidobenzyl]benzol. Sm. 212–213° (2 HCl,  $PtCl_4$ ,  $H_2SO_4$  (M. 23, 980 C. 1903 [1] 288).
- 8) Aethylester d. 6-Methyl-1,3-Diphenyl-1,4-Dihydro-1,2-Diazin-5-Carbonsäure. Sm. 114–116° (A. 331, 310 C. 1904 [2] 45).
- 9) Verbindung (aus  $\alpha$ -Cyanpropionsäureäthylester). Sm. 195° u. Zers. (C. 1903 [2] 713).
- $C_{20}H_{20}O_2N_4$  4) Verbindung (aus Dibenzyldihydroxylamin). Sm. 115° (B. 36, 2289 C. 1903 [2] 564).
- $C_{20}H_{20}O_2N_6$  3) 6,8 — H 5,3 — O 8,5 — N 22,3 — M. G. 376.
- 1) 3,6-Di[4-Acetylamidobenzyl]-1,2,4,5-Tetrazin. Sm. 205° (B. 35, 3939 C. 1903 [1] 39).
- $C_{20}H_{20}O_2S_2$  1) Dibenzylläther d. 2,5-Dimethyl-1,4-Diketo-hexahydrobenzol. Sm. 160–163° (A. 336, C. 1904 [1] 1300).
- $C_{20}H_{20}O_3N_2$  2) Anhydrocotarninbenzylcyanid. Sm. 134°. HCl (B. 37, 3336 C. 1904 [2] 1155).
- $C_{20}H_{20}O_4N_2$  13) Aethylester d.  $\gamma$ -Phenylhydrazon- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha$ -Buten-3,4-Methylenäther- $\beta$ -Carbonsäure. Sm. 135° (B. 37, 1704 C. 1904 [1] 1497).
- 14) Diacetat d. Di[6-Oxy-3-Methylbenzyliden]hydrazin. Sm. 163° (B. 37, 3187 C. 1904 [2] 992).
- $C_{20}H_{20}O_5N_2$  \*1) Papaveraldoxim (C. 1903 [1] 844).
- 3) Tetramethyläther d. 6,7-Dioxy-1-[6-Amido-3,4-Dioxybenzoyl]isochinolin (Amidopapaveraldin). Sm. 171–172° (B. 37, 1938 C. 1904 [2] 129).
- 4) Nitrosopapaverin. Sm. 181,5°. HCl, (2 HCl,  $PtCl_4$ ),  $HNO_2$ ,  $HNO_3$ , Pikrat (C. 1903 [1] 844).
- $C_{20}H_{20}O_6N_2$  \*4) Tetramethyläther d. 6,7-Dioxy-1-[6-Nitro-3,4-Dioxybenzyl]isochinolin (Nitropapaverin). Sm. 186–187° (B. 37, 1930 C. 1904 [2] 128).
- 17) Diäthylester d.  $\alpha\beta$ -Dibenzoylhydrazin- $\alpha\beta$ -Dicarbonsäure. Sm. 83° (P. GUTMANN, Dissert., Heidelberg 1903).
- 18) Diacetat d. 4,4'-Di[Acetylamido]-2,2'-Dioxybiphenyl. Sm. 128° (J. pr. [2] 67, 271 C. 1903 [1] 1221).
- $C_{20}H_{20}O_6N_4$  C 58,2 — H 4,8 — O 23,3 — N 13,6 — M. G. 412.
- 1) 1-Diäthylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 95–95,5° (Soc. 83, 1337 C. 1904 [1] 99).
- 2) 2-Diäthylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 116° (Soc. 83, 1339 C. 1904 [1] 99).
- $C_{20}H_{20}O_7N_2$  4) Aethylester d.  $\beta$ -Acetyl- $\alpha\gamma$ -Di[4-Nitrophenyl]propan- $\beta$ -Carbonsäure (Ac. d. Di-[4-Nitrobenzyl]acetessigsäure). Sm. 139–140° (C. 32 [2] 356 C. 1903 [1] 629).
- $C_{20}H_{20}O_8N_2$  2) Di[ $\beta$ -Nitro-2,4-Dimethylphenylester] d. Bernsteinsäure. Sm. 169° (B. 35, 4080 C. 1903 [1] 74).
- $C_{20}H_{20}O_8N_4$  C 54,0 — H 4,5 — O 28,0 — N 12,6 — M. G. 222.
- 1) Benzalacetonepseudonitrosit. Sm. 109–110° u. Zers. (A. 329, 257 C. 1904 [1] 32).
- $C_{20}H_{20}O_{10}N_2$  2) Di[3-Nitrobenzyliden]sorbit. Sm. 220° (B. [3] 29, 505 C. 1903 [2] 237).
- $C_{20}H_{20}O_{12}N_2$  C 50,9 — H 4,2 — O 40,0 — N 5,8 — M. G. 480.
- 1) Dinitrotetramethylhämatoxylon. Sm. 187–192° u. Zers. (B. 36, 369 C. 1903 [1] 587; M. 25, 888 C. 1904 [2] 1313). — \*III, 490.
- $C_{20}H_{20}N_3S_4$  1) Dialläläther d. Di[Phenylimidomerkaptomethyl]disulfid. Sm. 74 bis 75° (B. 36, 2265 C. 1903 [2] 562).

- $C_{20}H_{21}ON$  8)  $\alpha$ -[1-Piperidyl]- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen. Sm. 99—100° (*Soc.* 85, 1323 *C.* 1904 [2] 1645).
- $C_{20}H_{21}ON_3$  \*1) Rosanilin (*B.* 37, 3031 *C.* 1904 [2] 1010).
- 3) Methyläther d.  $\alpha$ -Oxy-4,4',4''-Triamidotriphenylmethan. Sm. 105°. +  $(C_2H_5)_2O$ , +  $C_6H_6$  (Sm. 135°) (*B.* 37, 2874 *C.* 1904 [2] 777).
- $C_{20}H_{21}O_2N$  4) Monoxim d. 2-Keto-1-[ $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropyl]-R-Pentamethylen. Sm. 154—155° (*B.* 35, 3974 *C.* 1903 [1] 37).
- $C_{20}H_{21}O_3N$  2) Aethylester d.  $\alpha$ -Phenylimido- $\gamma$ -Keto- $\alpha$ -Phenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm. 158° (D.R.P. 33497). — \*II, 1079.
- $C_{20}H_{21}O_4N$  \*2) Tetrahydroberberin (i-Canadin) (*Soc.* 83, 618 *C.* 1903 [1] 590).
- \*3) Papaverin. HJ, Ferrocyanat +  $5H_2O$ , CHNS, Oxalat (*C.* 1903 [2] 385; *Soc.* 83, 616 *C.* 1903 [1] 590; *J. pr.* [2] 68, 193 *C.* 1903 [2] 838).
- 8) Acetylmorphotebain. Sm. 183° (*B.* 17, 531). — III, 910.
- 9) Anhydrocotarninacetophenon. Sm. 126°. (2HCl, PtCl<sub>4</sub>) (*B.* 37, 215 *C.* 1904 [1] 591).
- 10) Verbindung (aus Tetramethoxydesoxybenzoïnacetalamin). Sm. 162° (*A.* 329, 60 *C.* 1903 [2] 1448).
- $C_{20}H_{21}O_4N_8$  C 65,4 — H 5,7 — O 17,4 — N 11,4 — M. G. 367.
- 1) Monosemicarbazon d.  $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 138—140° (*A.* 331, 317 *C.* 1904 [2] 46).
- $C_{20}H_{21}O_4N_6$  C 60,7 — H 5,3 — O 16,2 — N 17,7 — M. G. 395.
- 1) Benzylidenhydrazid d. Benzoylbis[Amidoacetyl]amidoessigsäure. Sm. 264° (*J. pr.* [2] 70, 95 *C.* 1904 [2] 1035).
- $C_{20}H_{21}O_5N$  5) 4-Acetat d. 4-Oximido-6-Oxy-2-[4-Oxyphenyl]-2,3-Dihydrobenzopyran-2'-Methyläther-6-Aethyläther. Sm. 168° (*B.* 33, 1484). — \*III, 560.
- $C_{20}H_{21}O_7N$  2) Oxim d. Tetramethylhämatoxylon (*B.* 36, 3714 *C.* 1904 [1] 38).
- $C_{20}H_{21}N_3Br_2$  1) 8, 8'-Dibrom-5, 5'-Diazoamido-1, 2, 3, 4, 1', 2', 3', 4'-Oktahydro-naphtalin (*Soc.* 85, 748 *C.* 1904 [2] 447).
- $C_{20}H_{22}O_2N_2$  22) Dehydrochinin. Sm. 185°. HCl +  $xH_2O$ , Oxalat +  $xH_2O$ , (4 + 3H<sub>2</sub>SO<sub>4</sub>, 2HJ, J<sub>2</sub>) (*J. pr.* [2] 69, 217 *C.* 1904 [1] 1448).
- 23) Base (aus Phenacetin). Sm. 220°. HCl (D.R.P. 137121 *C.* 1903 [1] 107).
- 24) Phenylpyrazol d. 3-Keto-2-Benzoyl-1-Phenyl-R-Pentamethylen-5-Carbonsäuremethylester. Sm. 149—150° (*A.* 326, 378 *C.* 1903 [1] 1126).
- $C_{20}H_{22}O_3N_2$  7) Succineïn d. m-Dimethylamidophenol (D.R.P. 51983, 54997). — \*III, 571.
- 8) Aethylester d.  $\alpha$ -Phenylhydrazon- $\delta$ -Keto- $\alpha$ -Phenylpentan- $\gamma$ -Carbonsäure. Sm. 152° (*A.* 331, 309 *C.* 1904 [2] 45).
- $C_{20}H_{22}O_3N_4$  4) Benzylidenhydrazid d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 154° (*J. pr.* [2] 70, 208 *C.* 1904 [2] 1459).
- 5) Benzylidenhydrazid d.  $\alpha$ -[ $\alpha$ -Benzoylamidopropionyl]amidopropionsäure. Sm. 230° (*J. pr.* [2] 70, 151 *C.* 1904 [2] 1394).
- $C_{20}H_{22}O_4N_2$  21) Diäthyläther d.  $\beta$ -Phenylazo- $\alpha\gamma$ -Diketo- $\alpha$ -[2,4-Dioxyphenyl]butan. Sm. 82—83° (*B.* 37, 356 *C.* 1904 [1] 670).
- 22) Tetramethyläther d. 6,7-Dioxy-1-[6-Amido-3,4-Dioxybenzyl]isochinolin +  $H_2O$  (Amidopapaverin). Sm. 116° (143° wasserfrei) (*B.* 37, 1933 *C.* 1904 [2] 129).
- 23) Aethylester d.  $\alpha$ -Benzoylamidoacetylamido- $\beta$ -Phenylpropionsäure. Sm. 98° (*J. pr.* [2] 70, 227 *C.* 1904 [2] 1461).
- $C_{20}H_{22}O_4N_4$  \*2) Diäthylester d. Di[Phenylhydrazon]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 154—155° (*B.* [3] 31, 95 *C.* 1904 [1] 581).
- 8) 2,4,2',4'-Tetra[Acetylamido]biphenyl +  $3H_2O$ . Sm. 284° (wasserfrei) (*J. pr.* [2] 66, 562 *C.* 1903 [1] 518).
- 9)  $\alpha\beta$ -Di[ $\alpha$ -Benzoylamidopropionyl]hydrazin. Sm. 262° (*J. pr.* [2] 70, 147 *C.* 1904 [2] 1394).
- 10) 2-Oxybenzylidenhydrazid d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 186° (*J. pr.* [2] 70, 209 *C.* 1904 [2] 1460).
- 11) Di[ $\alpha$ -Phenyläthylidenhydrazid] d. d-Weinsäure. Sm. 232° (*Soc.* 83, 1365 *C.* 1904 [1] 85).
- $C_{20}H_{22}O_4N_6$  C 58,5 — H 5,3 — O 15,6 — N 20,5 — M. G. 410.
- 1) Benzylidenhydrazid d.  $\beta$ -Phenylureidoacetylamidoacetylamidoessigsäure. Sm. 247,5° (*J. pr.* [2] 70, 261 *C.* 1904 [2] 1465).

- $C_{20}H_{23}ON$  2) d-1- $[\beta$ -Phenylisobutyryl]amido-2-Methyl-2,3-Dihydroinden. Sm. 152° (Soc. 85, 448 C. 1904 [1] 1445).
- $C_{20}H_{23}O_2N$  3) Dimethylapomorphimethin. Fl. HCl (B. 35, 4390 C. 1903 [1] 339). C 71,2 — H 6,8 — O 9,5 — N 12,5 — M. G. 337.
- $C_{20}H_{23}O_2N_3$  1) Isonitrosomethyleinchotoxin (B. 33, 3225). — \*III, 637.
- $C_{20}H_{23}O_3N$  5) Aethylester d.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm. 123°. HCl (Soc. 85, 1000 C. 1904 [2] 704).
- 6) Aethylester d.  $\alpha$ -[2-Methylphenyl]amido- $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 89–90° (Soc. 85, 1177 C. 1904 [2] 1216).
- $C_{20}H_{23}O_4N_3$  7) Triacetylderivat d. 4-Amido-4'-Dimethylamidodiphenylamin. Sm. 142° (J. pr. [2] 69, 228 C. 1904 [1] 1268).
- $C_{20}H_{23}O_4N_5$  2) 2-Semicarbazon-1,4,5-Trioxyl-3,4-Dimethyl-4,5-Diphenyl-R-Pentamethylen. Sm. 165–180° u. Zers. (Soc. 83, 300 C. 1903 [1] 878).
- 3) Tolypyrinorthoform. Sm. 86° (A. 325, 319 C. 1903 [1] 769).
- 4) isom. Tolypyrinorthoform. Sm. 79–80° (A. 325, 319 C. 1903 [1] 769).
- 5) Benzylester d.  $\beta$ -Benzoylamidoacetylamidopropylamidoameisen-säure. Sm. 152–153° (J. pr. [2] 70, 218 C. 1904 [2] 1460).
- $C_{20}H_{23}O_5N$  2) Diäthylester d. 2,5-Dimethyl-1-[4-Acetylphenyl]pyrrol-3,4-Dicarbonsäure. Sm. 114° (B. 36, 394 C. 1903 [1] 723).
- $C_{20}H_{23}O_6P$  \*2) Di[ $\alpha$ -Benzoxylisopropyl]unterphosphorige Säure (C. 1904 [2] 1708).
- $C_{20}H_{23}O_6N$  C 59,3 — H 5,7 — O 31,6 — N 3,4 — M. G. 405.
- 1) Verbindung (aus Triäthylamin u. Pyrogallolcarbonat). Sm. 111° (B. 37, 111 C. 1904 [1] 584).
- $C_{20}H_{24}ON_2$  \*5) Methyleinchotoxin. Sm. 74–75° (B. 37, 1675 C. 1904 [1] 1526).
- 11)  $\alpha$ -Acetyl- $\alpha$ -[2,5-Dimethylbenzyl]- $\beta$ -[2,5-Dimethylbenzyliden]-hydrazin. Sm. 137° (C. 1903 [1] 141).
- $C_{20}H_{24}OS$  1) Benzyläther d.  $\gamma$ -Keto- $\epsilon$ -Merkapto- $\epsilon$ -Phenyl- $\beta$ -Methylpentan. Sm. 62–63° (B. 37, 506 C. 1904 [1] 883).
- $C_{20}H_{24}O_2N_2$  \*18) Chinin. Nitroprussidwasserstoffsalt (C. 1903 [2] 385; C. r. 136, 129 C. 1903 [1] 524; Soc. 83, 624 C. 1903 [1] 1364; Ar. 241, 54 C. 1903 [1] 1005; C. 1904 [2] 1742).
- \*20) Conchinin (Chinidin). Nitroprussidwasserstoffsalt + 2H<sub>2</sub>O (C. 1903 [2] 385; C. r. 136, 137 C. 1903 [1] 525).
- 40) 4,4'-Di[Acetyläthylamido]biphenyl. Sm. 167° (166,5–177,5°) (C. 1903 [1] 1128; B. 35, 4184 C. 1903 [1] 143).
- 41) Di[Phenylamid] d.  $\beta$ -Methylpentan- $\alpha$ , $\delta$ -Dicarbonsäure. Sm. 158° (C. r. 138, 210 C. 1904 [1] 663).
- 42) Di[Phenylamid] d.  $\beta$ -Aethylbutan- $\alpha$ , $\alpha$ -Dicarbonsäure. Sm. 219–220° (Bl. [3] 31, 351 C. 1904 [1] 1134).
- $C_{20}H_{24}O_2N_4$  2)  $\alpha$ , $\gamma$ -Di[2,4-Dimethylphenylnitrosamido]- $\alpha$ -Buten. Sm. 79–80° (A. 329, 222 C. 1903 [2] 1428).
- $C_{20}H_{24}O_2J_2$  1) Verbindung (aus Thymol) (M. 24, 74 C. 1903 [1] 767).
- $C_{20}H_{24}O_8S$  2)  $\gamma$ -Keto- $\epsilon$ -Benzylsulfon- $\epsilon$ -Phenyl- $\beta$ -Methylpentan. Sm. 133–134° (B. 37, 506 C. 1904 [1] 883).
- $C_{20}H_{24}O_4N_2$  11) 6-Methyläther-4,5-Methylenäther-1'-Aethyläther d. 4,5,6-Trioxyl-2-[ $\beta$ -Methylamidoäthyl]-1-[4-Oxyphenyl]imidomethylbenzol (Cotarnin-p-Aethoxyanil). Sm. 120° (B. 36, 1528 C. 1903 [2] 51).
- 12) Metochinon. Sm. 135° u. Zers. (C. 1903 [1] 1129).
- 13) Di[Phenylamidoformiat] d.  $\alpha$ , $\zeta$ -Dioxyhexan. Sm. 171–172° (C. r. 136, 245 C. 1903 [1] 583).
- $C_{20}H_{24}O_5N_2$  3) Nitrosoisotetrahydropapaverin. Sm. 138° (B. 37, 3322 C. 1904 [2] 1155).
- 4) Diäthylester d. 1-Phenacetyl-amido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 146–147° (B. 35, 4316 C. 1903 [1] 336).
- $C_{20}H_{24}O_5N_4$  C 60,0 — H 6,0 — O 20,0 — N 14,0 — M. G. 400.
- 1) Methylester d.  $\delta$ -Oximido- $\epsilon$ -Phenylhydroxylhydrazon- $\gamma$ -Phenylamido- $\gamma$ -Oxy- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 108–110° u. Zers. (Soc. 83, 1243 C. 1903 [2] 1421).
- $C_{20}H_{24}O_6N_4$  2) 1-Phenylhydrazid d. 2,5-Dimethylpyrrol-1-Oxaminsäure-3,4-Dicarbonsäure. Sm. 194–195° (B. 37, 2427 C. 1904 [2] 341).
- $C_{20}H_{24}O_8N_2$  C 57,1 — H 5,7 — O 30,5 — N 6,7 — M. G. 420.
- 1) Anetholpseudonitrosit. Zers. bei 120° (A. 329, 261 C. 1904 [1] 32).

- $C_{20}H_{24}O_9N_4$  C 51,7 — H 5,2 — O 31,0 — N 12,1 — M. G. 464.  
 1) Di[4-Nitrobenzyl]hydrazon d. Fruktose. Sm. 112° (R. 22, 439 C. 1904 [1] 15).  
 2) Di[4-Nitrobenzyl]hydrazon d. Galaktose. Sm. 153° (R. 22, 439 C. 1904 [1] 15).  
 3) Di[4-Nitrobenzyl]hydrazon d. Glykose. Sm. 142° (R. 22, 439 C. 1904 [1] 15).
- $C_{20}H_{24}N_3J$  1) 2-Jodpropylat d. 5-Methylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 134° (B. 36, 3277 C. 1903 [2] 1189).
- $C_{20}H_{25}ON_3$  3)  $\alpha$ -Nitroso- $\alpha$ -[2,4,6-Trimethylbenzyl]- $\beta$ -[2,4,6-Trimethylbenzyliden]hydrazin. Sm. 117° (C. 1903 [1] 142).
- $C_{20}H_{26}O_3N$  5) 4-Keto-1-[4-Oxy-2-Methyl-5-Isopropylphenyl]imido-2-Methyl-5-Isopropyl-1,4-Dihydrobenzol (Thymechinonethyranolimid) (B. 7, 1100; B. 36, 2892 C. 1903 [2] 876).  
 6) Phenylamidoformiat d.  $\alpha$ -Oxy- $\alpha$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylpropan. Sm. 169° (B. 37, 928 C. 1904 [1] 1209).
- $C_{20}H_{25}O_4N$  \*2) r-Laudamin (Soc. 83, 626 C. 1903 [1] 591).  
 \*6) i-Tetrahydropapaverin (Soc. 83, 616 C. 1903 [1] 591).  
 9) Isotetrahydropapaverin. HJ (B. 37, 3323 C. 1904 [2] 1155).  
 10) Isolaudanin. Sm. 76° (C. 1903 [1] 845).
- $C_{20}H_{26}O_3N_2$  6) Oxydihydrochinin. HCl (D.R.P. 152174 C. 1904 [2] 166).
- $C_{20}H_{26}O_4N_2$  2) Yohimboasäure (Noryohimbin). Sm. 257—260° u. Zers. Ag (B. 36, 170 C. 1903 [1] 471; B. 37, 1762 C. 1904 [1] 1527).
- $C_{20}H_{26}O_4N_4$  \*1) Di[Methylphenylhydrazon] d. d-Glykose. Sm. 153° (B. 37, 3362 C. 1904 [2] 1210).  
 11) 2,2'-Dinitro-4,4'-Di[Diäthylamido]biphenyl. Sm. 114° (132°) (C. 1901 [2] 1375; B. 37, 31 C. 1904 [1] 524).
- $C_{20}H_{26}O_7N_4$  2) Dimethylester d. Phenylhydrazonglyoximperoxyddihydrotetramethylimalonsäure. Sm. 177° (Soc. 83, 1261 C. 1903 [2] 1423).
- $C_{20}H_{27}O_2N$  \*2) Di[4-Oxy-2-Methyl-5-Isopropylphenyl]amin. HJ (B. 36, 2892 C. 1903 [2] 875).
- $C_{20}H_{27}O_2N_3$  C 70,4 — H 7,9 — O 9,4 — N 12,3 — M. G. 341.  
 1) Mentylester d.  $\alpha$ -Cyan- $\alpha$ -[4-Methylphenyl]azoessigsäure. Sm. 93 bis 95° (C. 1903 [1] 566; Soc. 85, 44 C. 1904 [1] 789).
- $C_{20}H_{27}O_3N$  2) Monophenylamidoformiat d. 9-Methyl-3-Isopropenylbicyklo-[1,3,3]-Nonan-5,7-diol. Sm. 55—65° (B. 36, 232 C. 1903 [1] 514).  
 3) Monophenylamidoformiat d. isom. 9-Methyl-3-Isopropenylbicyklo-[1,3,3]-Nonan-5,7-diol. Zers. bei 80° (B. 36, 233 C. 1903 [1] 514).
- $C_{20}H_{27}O_6N$  C 63,7 — H 7,1 — O 25,5 — N 3,7 — M. G. 377.  
 1) Aethylester d. Anhydrocotarninäthylacetessigsäure. Fl. HCl, (2HCl, PtCl<sub>4</sub>) (B. 37, 2748 C. 1904 [2] 545).
- $C_{20}H_{28}O_3N_2$  2) Anhydrid d. Oximidocampher. Sm. 187° (Soc. 83, 530 C. 1903 [1] 1136, 1353; Soc. 85, 907 C. 1904 [2] 597).  
 3) Mentylester d.  $\alpha$ -Phenylazoacetylessigsäure. Sm. 76—77° (Soc. 83, 1120 C. 1903 [2] 23, 791).  
 4) Verbindung (aus d. Benzoat d. Oximidocampher). Sm. 154° (Soc. 85, 907 C. 1904 [2] 597).
- $C_{20}H_{28}O_4N_2$  2) Peroxyd (aus Oximidocampher). Sm. 96° u. Zers. (Soc. 85, 900 C. 1904 [2] 597).  
 3) Verbindung (aus d. Peroxyd  $C_{20}H_{28}O_4N_2$ ). Sm. 207° u. Zers. (Soc. 85, 901 C. 1904 [2] 597).
- $C_{20}H_{28}O_5N_2$  4) Anhydrid d. Camphoryloxim. Sm. 220° (Soc. 83, 955 C. 1903 [2] 201, 665).  
 5) Verbindung (aus d. Verb.  $C_{20}H_{28}O_4N_2$ ). Sm. 172—173° u. Zers. (Soc. 85, 900 C. 1904 [2] 597).
- $C_{20}H_{29}O_2N$  \*1) Mentylester d.  $\beta$ -Phenylamidopropen- $\alpha$ -Carbonsäure. Sm. 89—90° (Soc. 81, 1506 C. 1903 [1] 138).
- $C_{20}H_{29}O_4N_3$  \*1) Mentylester d.  $\beta$ -[4-Nitrophenyl]hydrazidopropen- $\alpha$ -Carbonsäure (Soc. 81, 1504 C. 1903 [1] 138).
- $C_{20}H_{29}O_5N_3$  C 61,4 — H 7,4 — O 20,5 — N 10,7 — M. G. 391.  
 1) Amylester d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amido-propionsäure. Sm. 155° (J. pr. [2] 70, 124 C. 1904 [2] 1037).
- $C_{20}H_{30}O_4S_2$  1) Disulfid d. Merkaptocampher. Sm. 224° (Soc. 83, 482 C. 1903 [1] 923, 1137).

- $C_{20}H_{30}O_4N_4$  C 61,5 — H 7,7 — O 16,4 — N 14,4 — M. G. 390.  
 1) Verbindung (aus d. Verb.  $C_{20}H_{30}O_4N_2$ ). Zers. bei 262° (Soc. 85, 90 C. 1904 [2] 597).
- $C_{20}H_{30}O_4S_2$  1) 1,4-Diacetat d. 2,5-Dimerkapto-1,4-Dioxybenzol-2,5-Diisoamyläther. Sm. 103—106° (A. 336, 157 C. 1904 [2] 1300).
- $C_{20}H_{30}O_{14}N_6$  \* 1) Dimyrcennitrosit. Zers. bei 160—161° (B. 35, 4429 C. 1903 [1] 337; B. 36, 1937 C. 1903 [2] 201; B. 37, 3846 C. 1904 [2] 1613).
- $C_{20}H_{31}ON$  2) l-Menthylamid d. d- $\beta$ -Phenylisobuttersäure. Sm. 140° (Soc. 85, 44 C. 1904 [1] 1445).
- $C_{20}H_{32}O_4N_2$  3) Verbindung (aus Nitrosodihydrolauro-laktam). Sm. 99° (Am. 32, 29 C. 1904 [2] 1222).
- $C_{20}H_{34}NCl$  1) Chlorisoamylat d. d-2-Propyl-1-Benzylhexahydropyridin (Ch. N-Benzylconiin). 2 + PtCl<sub>4</sub> (B. 37, 3635 C. 1904 [2] 1510).  
 2) isom. Chlorisoamylat d. d-2-Propyl-1-Benzylhexahydropyridin 2 + PtCl<sub>4</sub> (B. 37, 3635 C. 1904 [2] 1510).
- $C_{20}H_{34}NJ$  1) Jodisoamylat d. d-2-Propyl-1-Benzylhexahydropyridin (J. d. N-Benzylconiin). Sm. 169° (B. 37, 3634 C. 1904 [2] 1510).  
 2) isom. Jodisoamylat d. d-2-Propyl-1-Benzylhexahydropyridin Sm. 185° (B. 37, 3634 C. 1904 [2] 1510).
- $C_{20}H_{36}O_2N_2$  3) Oxamid d. act.  $\alpha$ -Dihydrocampholenamin. Sm. 147—148° (Bl. [3] 27, 74 C. 1902 [1] 585).  
 4) Oxamid d. r- $\alpha$ -Dihydrocampholenamin. Sm. 150° (C. r. 136, 114 C. 1903 [1] 1410).  
 5) Ureid d. r- $\alpha$ -Dihydrocampholenaminharnstoff. Sm. 112° (Bl. [3] 28, 609 C. 1903 [2] 374).
- $C_{20}H_{36}O_2Br_2$  3) Aethylster d. Dibromdihydrochaulmoograsäure. Fl. (Soc. 85, 85 C. 1904 [2] 348, 604).
- $C_{20}H_{37}O_3Br$  1) Bromacetoxylstearinsäure. Fl. (J. pr. [2] 67, 295 C. 1903 [1] 1401).
- $C_{20}H_{37}O_4Br$  2)  $\beta$ -Brom- $\beta$ -Acetoxylstearinsäure. Fl. (C. 1903 [1] 319).
- $C_{20}H_{37}O_6N$  C 62,0 — H 9,6 — O 24,8 — N 3,6 — M. G. 387.  
 1)  $\beta$ -Nitro- $\beta$ -Acetoxylstearinsäure. Fl. (C. 1904 [1] 260).
- $C_{20}H_{37}N_2J$  1) Jodisoamylat d. Spartein. Sm. 229°. HJ (Ar. 242, 519 C. 1904 [2] 1413).

## — 20 IV —

- $C_{20}H_6O_7Cl_4Br_2$  1) Tetrachlordibromdioxyfluorescein (B. 36, 1079 C. 1903 [1] 1182).
- $C_{20}H_7O_7NBr_4$  1)  $\beta$ -Nitrotetrabromfluorescein (D. R. P. 139428 C. 1903 [1] 679).
- $C_{20}H_8O_7Cl_2Br_2$  1) Dichlordibromdioxyfluorescein (B. 36, 1081 C. 1903 [1] 1182).
- $C_{20}H_{10}O_2N_2Cl_4$  1) 2,3-Di[3,5-Dichlor-4-Oxyphenyl]-1,4-Benzdiazin. Sm. 256—257° (A. 325, 89 C. 1903 [1] 465).
- $C_{20}H_{10}O_2N_2Br_4$  1) 2,3-Di[3,5-Dibrom-4-Oxyphenyl]-1,4-Benzdiazin. Sm. 240° (A. 325, 91 C. 1903 [1] 465).
- $C_{20}H_{11}O_2NCl_2$  1) Verbindung (aus Fluoresceinchlorid). Sm. 235° (D. R. P. 48980). — \*II, 1209.
- $C_{20}H_{11}O_7N_6Br$  1) 3-Oxy-2-[3-Brom-2-(2,4,6-Trinitrophenyl)amidophenyl]-1,4-Benzdiazin. Sm. 287—288° (B. 35, 4334 C. 1903 [1] 293).
- $C_{20}H_{12}O_2NBr$  2) Brom- $\alpha'$ -Phenylpyrophtalon. Sm. 131° (B. 36, 3921 C. 1904 [1] 98).
- $C_{20}H_{12}O_3NCl$  1) Benzotat d. Verb.  $C_{19}H_8O_2NCl$ . Sm. 231° (Bl. [3] 31, 532 C. 1904 [1] 1598).
- $C_{20}H_{12}O_4N_4Cl_2$  1) 1,4-Di[4-Chlor-2-Nitrobenzylidenamido]benzol. Sm. 230° (B. 37, 1871 C. 1904 [1] 1601).
- $C_{20}H_{18}ON_2Br$  1) 2[oder 7]-Brom-9-Phenylhydrazon-10-Keto-9,10-Dihydrophenanthren. Sm. 171—172° (B. 37, 3561 C. 1904 [2] 1401).
- $C_{20}H_{19}O_2NCl_2$  1) 3-Chlor-4-Benzoylchloramidodiphenylketon. Sm. 123° (Soc. 85, 343 C. 1904 [1] 1405).
- $C_{20}H_{19}O_2NBr_4$  1)  $\alpha'$ -Phenylpyrophtalontetrabromid. Sm. 237° (B. 36, 3920 C. 1904 [1] 98).
- $C_{20}H_{14}ON_2S$  2) 2-[2-Naphtyl]imido-4-Keto-5-Benzylidentetrahydrothiazol. Sm. 272° u. Zers. (C. 1903 [2] 110).
- $C_{20}H_{14}O_2NCl$  1) Benzyläther d. Verb.  $C_{19}H_8O_2NCl$ . Sm. 142° (Bl. [3] 31, 532 C. 1904 [1] 1598).  
 2) 3-Chlor-4-Benzoylamidodiphenylketon. Sm. 126° (Soc. 85, 342 C. 1904 [1] 1405).

- $C_{20}H_{14}O_2NCl$  3) 2-Benzoylchloramidodiphenylketon. Sm. 98° (*C.* 1903 [1] 1137).  
 4) 4-Benzoylchloramidodiphenylketon. Sm. 107° (*C.* 1903 [1] 1138).
- $C_{20}H_{14}O_2NBr$  2) 4-Benzoylbromamidodiphenylketon. Sm. 93° (*C.* 1903 [1] 1138).  
 3) Phenyl-4-Brombenzoylamid d. Benzolcarbonsäure. Sm. 150° (*Am.* 30, 33 *C.* 1903 [2] 363).
- $C_{20}H_{14}O_2N_2S$  1)  $\alpha$ -Rhodan-4-Nitrotriphenylmethan. Sm. 114—115° (*B.* 37, 607 *C.* 1904 [1] 887).  
 2) 2-Nitrobenzyläther d. 5-Merkaptoakridin. Sm. 129—130° (2HCl,  $PtCl_4$ ), Pikrat (*J. pr.* [2] 68, 78 *C.* 1903 [2] 445).  
 3) 4-Nitrobenzyläther d. 5-Merkaptoakridin. Sm. 152° (2HCl,  $PtCl_4$ ), Pikrat (*J. pr.* [2] 68, 80 *C.* 1903 [2] 445).
- $C_{20}H_{14}O_4N_2S$  10) Phenylsulfondianthranil. Sm. 211—212° (*B.* 36, 4185 *C.* 1904 [1] 279).
- $C_{20}H_{14}O_7N_2S_2$  5) 4-Oxy-1,1'-Azonaphtalin-3,2'-Disulfonsäure (*Soc.* 83, 212 *C.* 1903 [1] 638).
- $C_{20}H_{15}ONS$  1) Benzoylphenylamid d. Benzolthiocarbonsäure. Sm. 108—109° (*C.* 1904 [1] 1003).
- $C_{20}H_{15}O_2NBr_2$  1) N-Benzoylderivat d. Phenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 167—168° (163°) (*A.* 332, 200 *C.* 1904 [2] 211; *B.* 37, 3940 *C.* 1904 [2] 1597).
- $C_{20}H_{15}O_2NS$  6) 9-Phenylsulfonamidphenanthren. Sm. 194—195° (*B.* 36, 2515 *C.* 1903 [2] 507).
- $C_{20}H_{15}O_5NS_2$  \*1) Oxyimid d. Naphtalin-1-Sulfonsäure. Sm. 102° (*G.* 33 [2] 309 *C.* 1904 [1] 288).
- $C_{20}H_{16}ON_5Cl$  1)  $\alpha$ -Phenylamidoformylimido- $\alpha$ -[4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 201° (*J. pr.* [2] 67, 461 *C.* 1903 [1] 1422).
- $C_{20}H_{16}O_2N_2S$  2) 4'-[3-Nitrobenzyliden]amido-4-Methyldiphenylsulfid. Sm. 115° (*J. pr.* [2] 68, 272 *C.* 1903 [2] 993).  
 3) 4-[4-Nitrobenzyliden]amido-4-Methyldiphenylsulfid. Sm. 109° (*J. pr.* [2] 68, 273 *C.* 1903 [2] 993).
- $C_{20}H_{16}O_5N_4S$  1) 3,4-Methylenäther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Sulfophenyl]azo- $\alpha$ -[3,4-Dioxyphenyl]methan. K (*C.* 1903 [2] 427).  
 2) 3-[4-Sulfophenyl]hydrazonmethylazobenzol-3'-Carbonsäure.  $K_2$  (*B.* 36, 3474 *C.* 1903 [2] 1270).
- $C_{20}H_{16}O_6N_4S_2$  1) Disazoverbindung (aus 4,4'-Diamido-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure u. 1,3-Dioxybenzöl). Ba (*J. pr.* [2] 66, 567 *C.* 1903 [1] 519).
- $C_{20}H_{16}NCIS$  1) 4'-[4-Chlorbenzyliden]amido-4-Methyldiphenylsulfid. Sm. 138° (*J. pr.* [2] 68, 273 *C.* 1903 [2] 993).
- $C_{20}H_{16}N_8ClIS$  1)  $\alpha$ -Phenylamidothioformylimido- $\alpha$ -[4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 148—151° (*J. pr.* [2] 67, 462 *C.* 1903 [1] 1422).
- $C_{20}H_{17}ONS$  1) 4'-[2-Oxybenzyliden]amido-4-Methyldiphenylsulfid. Sm. 114° (*J. pr.* [2] 68, 272 *C.* 1903 [2] 993).  
 2) 4'-[4-Oxybenzyliden]amido-4-Methyldiphenylsulfid. Sm. 185,5° (*J. pr.* [2] 68, 272 *C.* 1903 [2] 993).  
 3) 4'-Benzoylamido-4-Methyldiphenylsulfid. Sm. 192° (*J. pr.* [2] 68, 267 *C.* 1903 [2] 993).
- $C_{20}H_{17}ON_2Br$  2) 8-Brom-5-[2-Oxy-1-Naphtyl]azo-1,2,3,4-Tetrahydronaphtalin. Sm. 215° (*Soc.* 85, 749 *C.* 1904 [2] 448).
- $C_{20}H_{17}O_2N_8S$  1) Farbstoff (aus Galloeyanin u. 2,2'-Diamidodiphenyldisulfid) (*C.* 1904 [2] 1175).
- $C_{20}H_{17}O_6NS$  3) 2-[4-Methylphenylsulfon]amidodiphenylketon. Sm. 127° (*B.* 35, 4275 *C.* 1903 [1] 332).  
 4) 4-[4-Methylphenylsulfon]amidodiphenylketon. Sm. 184° (*Soc.* 85, 398 *C.* 1904 [1] 1404).
- $C_{20}H_{18}ON_2Cl_2$  1) Verbindung (aus s-Dichlordimethyläther u. Chinolin). +  $PtCl_4$  + 2AuCl<sub>3</sub> (*A.* 334, 66 *C.* 1904 [2] 949).
- $C_{20}H_{18}ON_8S$  3) 4-Methylphenyläther d.  $\alpha$ -Phenyl- $\beta$ -[4-Merkaptophenyl]harnstoff. Sm. 190° (*J. pr.* [2] 68, 270 *C.* 1903 [2] 993).
- $C_{20}H_{18}ON_4S$  2)  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha\beta$ -Diphenylharnstoff. Sm. 170° (*B.* 36, 1368 *C.* 1903 [1] 1342).
- $C_{20}H_{18}O_3N_2Br_2$  1) p-Dibrom-p-Di[Phenylamido]-1,2-Benzochinonmonoäthylhemi-acetat. Sm. 143° u. Zers. (*B.* 35, 3853 *C.* 1903 [1] 26).
- $C_{20}H_{18}O_4N_4S_2$  1) Cystinphenylhydantoin. Sm. 117° (*H.* 39, 354 *C.* 1903 [2] 792).

- $C_{20}H_{18}O_8N_2S$  1) Antranilopapaverinsulfonsäure. Sm. 233° (*B.* 37, 1937 *C.* 1904 [2] 129).
- $C_{20}H_{18}N_2ClJ$  1) Phenyl-2,3'-Dimethylazobenzol-4'-Jodoniumchlorid. Zers. bei 146°.  $2 + PtCl_4$  (*J. pr.* [2] 69, 324 *C.* 1904 [2] 35).
- $C_{20}H_{18}N_2BrJ$  1) Phenyl-2,3'-Dimethylazobenzol-4'-Jodoniumbromid. Sm. 146° u. Zers. (*J. pr.* [2] 69, 325 *C.* 1904 [2] 35).
- $C_{20}H_{19}ON_2J$  1) Phenyl-2,3'-Dimethylazobenzol-4'-Jodoniumhydroxyd. Salze siehe (*J. pr.* [2] 69, 324 *C.* 1904 [2] 35).
- $C_{20}H_{19}ON_7S_2$  1) Phenylsemicarbazid d. 6-Phenylsemicarbazidopyridin-3-Carbonsäure. Sm. 170–171°. Pikrat (*B.* 36, 1113 *C.* 1903 [1] 1184).
- $C_{20}H_{19}O_3NS$  1) Methylamid d.  $\alpha$ -Oxytriphenylmethan-2-Sulfonsäure. Sm. 194 bis 195° (*B.* 37, 3267 *C.* 1904 [2] 1031).
- $C_{20}H_{19}O_4N_3S$  1) Aethylester d. 2-Phenylimido-5-Benzoxyl-2,3-Dihydro-1,3,4-Thiodiazol-3-[Aethyl- $\alpha$ -Carbonsäure]. Sm. 110° (*C.* 1904 [2] 1028).  
2) Phenylamid d. 5-Phenylsulfon-4-Oxy-3-Methylphenylazo-ameisensäure. Sm. 153–154° u. Zers. (*A.* 334, 193 *C.* 1904 [2] 835).
- $C_{20}H_{20}O_8NP$  2) 2,4-Dimethylphenylmonamid d. Phosphorsäurediphenylester. Sm. 115° (*A.* 326, 240 *C.* 1903 [1] 868).
- $C_{20}H_{20}O_4NBr$  \*1) Tetramethyläther d. 6,7-Dioxy-1-[6-Brom-3,4-Dioxybenzyl]-isochinolin (Brompapaverin). HCl, Pikrat (*B.* 37, 3812 *C.* 1904 [2] 1575).
- $C_{20}H_{21}O_2N_2Cl$  1) Cinchonidinkohlensäurechlorid. Sm. 191° (D.R.P. 93698). — \*III, 641.
- $C_{20}H_{21}O_2N_2P$  1) Di[Benzylamid] d. Phosphorsäuremonophenylester. Sm. 114° (*A.* 326, 176 *C.* 1903 [1] 819).  
2) Di[2-Methylphenylamid] d. Phosphorsäuremonophenylester. Sm. 157,5° (*A.* 326, 251 *C.* 1903 [1] 868).
- $C_{20}H_{22}O_4NCl$  1) Chlormethylat d. Papaverolintrimethyläther. Sm. 70–71° (*C.* 1903 [1] 845).
- $C_{20}H_{22}O_4NJ$  2) Jodmethylat d. Papaverolintrimethyläther  $+ xH_2O$ . Sm. 63–64° (*C.* 1903 [1] 845).
- $C_{20}H_{22}O_6N_4Cl_2$  1) Methyl ester d.  $\delta$ -Oximido- $\epsilon$ -[4-Chlorphenyl]hydroxylhydrazon- $\gamma$ -[4-Chlorphenyl]amid- $\alpha$ -Oxy- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 111° (*A.* 335, 95 *C.* 1904 [2] 1421).
- $C_{20}H_{22}O_6N_4S_2$  1) Di[ $\beta$ -Phenylureidoäthyl]disulfid- $\beta\beta'$ -Dicarbonsäure (Cystinphenylhydantoinsäure) (*H.* 39, 354 *C.* 1903 [2] 792).
- $C_{20}H_{22}N_8SP$  1) Aethylphenylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 140° (*A.* 326, 258 *C.* 1903 [1] 869).
- $C_{20}H_{23}O_2N_2Br$  1) Bromchinin. Sm. 210°.  $2HCl + H_2O$ ,  $2HBr + 3H_2O$ ,  $H_2SO_4 + 7H_2O$ ,  $(4 + 3H_2SO_4, 2HJ, J_4)$  (*J. pr.* [2] 69, 211 *C.* 1904 [1] 1448).
- $C_{20}H_{23}O_2N_6J$  1) Verbindung (aus 5-Oxy-4-Methyl-1-Phenyl-1,2,3-Triazol). Sm. 168° (*A.* 335, 95 *C.* 1904 [2] 1232).
- $C_{20}H_{24}ON_2S$  1)  $\alpha$ -Caproylimido- $\alpha$ -Phenylbenzylamido- $\alpha$ -Merkaptomethan. Sm. 77–78° (*Soc.* 85, 811 *C.* 1904 [2] 202, 520).
- $C_{20}H_{24}O_2NJ$  \*1) Jodbenzylat d. 1,2,3,4-Tetrahydro-2-Isoschinolylessigsäureäthylester. Zers. bei 154–155° (*B.* 36, 1158 *C.* 1903 [1] 1186).  
2) Jodmethylat d. Dimethylapomorphin. Sm. 195° (*B.* 35, 4389 *C.* 1903 [1] 339).
- $C_{20}H_{24}O_2N_2Br_2$  \*1) Chinindibromid (*J. pr.* [2] 69, 209 *C.* 1904 [1] 1448).
- $C_{20}H_{24}O_2N_2Se_2$  1) Di[2,4-Dimethylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 184° (*A.* 241, 207 *C.* 1903 [2] 104).  
2) Di[2,5-Dimethylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 180–181° (*A.* 241, 208 *C.* 1903 [2] 104).
- $C_{20}H_{24}O_3BrJ$  1) Verbindung (aus Thymol) (*M.* 24, 77 *C.* 1903 [1] 767).
- $C_{20}H_{24}O_5NBr$  1) Methylhydroxyd d. Acetylbrommorphin. Jodid  $+ 2H_2O$  (*A.* 297, 217). — \*III, 669.
- $C_{20}H_{26}O_3NBr_2$  1) 4-Acetat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethanmethylhydroxyd. Zers. bei 120°. Chlorid (*A.* 334, 296 *C.* 1904 [2] 985).
- $C_{20}H_{26}O_3N_2J$  1) Jodmethylat d. 4, 5, 6 - Trioxy - 2 - [ $\beta$ -Dimethylamidoäthyl]-1-Phenylimidomethylbenzol-6-Methyläther-4, 5-Methylenäther (Anil d. Cotarninmethinmethyljodid). Sm. 199° (*B.* 36, 1528 *C.* 1903 [2] 52).

- $C_{20}H_{26}O_3N_2Br_2$  1) Menthylester d.  $\alpha$ -Brom- $\alpha$ -[4-Bromphenyl]azoacetessigsäure. Sm. 155° (*Soc.* 83, 1128 *C.* 1903 [2] 24, 792).
- $C_{20}H_{27}O_3N_2Cl$  1) Menthylester d.  $\alpha$ -[4-Chlorphenyl]azoacetylessigsäure. Sm. 103—105° (*Soc.* 83, 1123 *C.* 1903 [2] 24, 791).
- $C_{20}H_{27}O_3N_2Br$  1) Menthylester d.  $\alpha$ -Brom- $\alpha$ -Phenylazoacetessigsäure. Sm. 133 bis 134° (*Soc.* 83, 1126 *C.* 1903 [2] 24, 791).
- 2) Menthylester d.  $\alpha$ -[4-Bromphenyl]azoacetylessigsäure. Sm. 119—121° (*Soc.* 83, 1122 *C.* 1903 [2] 23, 791).
- $C_{20}H_{28}O_2NP$  1) Diphenyläther d. Diisobutylamidodioxyphosphin. *Fl.* (A. 326, 156 *C.* 1903 [1] 761).
- $C_{20}H_{28}O_3NP$  1) Diisobutylmonamid d. Phosphorsäurediphenylester. Sm. 56° (A. 326, 186 *C.* 1903 [1] 820).
- $C_{20}H_{30}ON_3P$  1) Dipropylmonamid-Di[4-Methylphenylamid] d. Phosphorsäure. Sm. 168° (A. 326, 185 *C.* 1903 [1] 820).
- 2) Diisobutylmonamid-Di[Phenylamid] d. Phosphorsäure. Sm. 202° (A. 326, 186 *C.* 1903 [1] 820).
- $C_{20}H_{32}ON_3P$  1) Diisobutylmonamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 168° (A. 326, 186 *C.* 1903 [1] 820).
- $C_{20}H_{36}O_2N_2Cl_2$  \* 1) Menthenbinistirochlorid (*C.* 1904 [1] 1347).
- $C_{20}H_{46}N_8SP$  1) Diäthylmonamid - Di[Diisobutylamid] d. Thiophosphorsäure. *Fl.* (A. 326, 218 *C.* 1903 [1] 822).

## — 20 V —

- $C_{20}H_{14}ONBrS$  1) Phenyl-4-Brombenzoylamid d. Benzolthiocarbonsäure. Sm. 120 bis 121° (*C.* 1904 [1] 1003).
- 2) Benzoylphenylamid d. 4-Brombenzolthiocarbonsäure. Sm. 133 bis 134° (*C.* 1904 [1] 1003).
- $C_{20}H_{16}O_3NClS$  1) 4-[4-Methylphenylsulfon]chloramidodiphenylketon. Sm. 116° (*Soc.* 85, 398 *C.* 1904 [1] 1404).
- $C_{20}H_{18}O_3NCl_2P$  1) 2, 4 - Dichlorphenylmonamid d. Phosphorsäuredi[4 - Methylphenylester]. Sm. 162° (A. 326, 229 *C.* 1903 [1] 867).
- $C_{20}H_{18}O_3NBr_2P$  1) 2, 4 - Dibromphenylmonamid d. Phosphorsäuredi[4 - Methylphenylester]. Sm. 158° (A. 326, 236 *C.* 1903 [1] 867).
- $C_{20}H_{19}O_3NBrP$  1) 4-Bromphenylmonamid d. Phosphorsäuredi[4-Methylphenylester]. Sm. 138° (A. 326, 233 *C.* 1903 [1] 867).
- $C_{20}H_{20}ON_8Br_2P$  1) 2, 4-Dibromphenylmonamid-Di[4-Methylphenylamid] d. Phosphorsäure. Sm. 214° (A. 326, 236 *C.* 1903 [1] 867).
- $C_{20}H_{21}ON_2SP$  1) Di[Phenylamid] d. Thiophosphorsäuremonophenylester. Sm. 73° (A. 326, 206 *C.* 1903 [1] 821).
- $C_{20}H_{24}O_2NClBr_2$  1) Acetat d. 3, 6-Dibrom-4'-Dimethylamido-4-Oxy-2, 5-Dimethyldiphenylmethanchlormethylat. Sm. 205—207° (A. 334, 296 *C.* 1904 [2] 985).
- $C_{20}H_{24}O_2NBr_2J$  1) Acetat d. 3, 6-Dibrom-4'-Dimethylamido-4-Oxy-2, 5-Dimethyldiphenylmethaniodmethylat. Sm. 169—171° (A. 334, 289 *C.* 1904 [2] 984).
- 2) Acetat d. 2, 6-Dibrom-4'-Dimethylamido-4-Oxy-3, 5-Dimethyldiphenylmethaniodmethylat. Sm. 184—185° u. Zers. (A. 334, 321 *C.* 1904 [2] 987).
- $C_{20}H_{26}O_3N_2ClBr$  1) Menthylester d.  $\alpha$ -Brom- $\alpha$ -[4-Chlorphenyl]azoacetessigsäure. Sm. 147—148° (*Soc.* 83, 1129 *C.* 1903 [2] 24, 792).

**C<sub>21</sub>-Gruppe.**

- $C_{21}H_{18}$  3) 4-[4-Methylbenzyl]fluoren. Sm. 72° (*M.* 25, 984 *C.* 1904 [2] 1653).
- $C_{21}H_{40}$  C 86,3 — H 13,7 — M. G. 292.
- 1) Kohlenwasserstoff (aus Petroleum) (*C.* 1904 [1] 409).

## — 21 II —

- $C_{21}H_{12}O_2$  \* 2)  $\alpha$ -Dinaphtoxanthon (*C. r.* 136, 1008 *C.* 1903 [1] 1267; *C.* 1904 [2] 122).
- \* 3)  $\beta$ -Dinaphtylenketonoxyd. Sm. 149° (*C. r.* 138, 1053 *C.* 1904 [1] 1612).

- $C_{21}H_{12}O_2$  5) Dinaphtopyron. Sm. 194° (*C. r.* 138, 1053 *C.* 1904 [1] 1613).  
 $C_{21}H_{12}O_3$  3)  $\alpha$ -Cumaryl keto- $\beta$ -Naphthofuran. Sm. 200° (*B.* 36, 2867 *C.* 1903 [2] 832).  
 $C_{21}H_{13}N$  \*1) 1,2,1',2'-Dinaphtakridin. Sm. 216°.  $HNO_3$  (*B.* 35, 4171 *C.* 1903 [1] 172; *B.* 36, 1028 *C.* 1903 [1] 1269; *B.* 36, 4052 *C.* 1904 [1] 185).  
 \*4) 1,2,2',3'-[ $\gamma$ ]-Naphthakridin (*B.* 36, 4052 *C.* 1904 [1] 185).  
 5) 1,2,2',1'-Dinaphtakridin. Sm. 228°.  $HCl$ ,  $HNO_3$  (*B.* 36, 1029 *C.* 1903 [1] 1269).  
 $C_{21}H_{14}O$  \*8) Dinaphtoxanthen (*C. r.* 139, 600 *C.* 1904 [2] 1504).  
 $C_{21}H_{14}O_2$  \*4) Dinaphtoxanthidrol (*C.* 1904 [2] 122).  
 8) 9-Keto-4-[4-Methylbenzoyl]fluoren. Sm. 128° (*M.* 25, 982 *C.* 1904 [2] 1653).  
 $C_{21}H_{14}O_3$  5) Methyläther d. 9-Keto-4-[4-Oxybenzoyl]fluoren. Sm. 95° (*M.* 25, 986 *C.* 1904 [2] 1653).  
 6) 2-Benzoylfluoren-2'-Carbonsäure. Sm. 227–230°. *Ag* (*B.* 36, 4035 *C.* 1904 [1] 168).  
 7) 2-Naphtylester d. 1-Oxynaphtalin-2-Carbonsäure. Sm. 138° (*D.R.P.* 43713). — \*II, 988.  
 $C_{21}H_{14}O_5$  2) Aldehyd d. 3,4-Dibenzoylbenzol-1-Carbonsäure. Sm. 98° (*B.* 36, 2930 *C.* 1903 [2] 887).  
 $C_{21}H_{14}O_6$  *C* 69,6 — *H* 3,8 — *O* 26,5 — *M. G.* 362.  
 1) 2',3'-Lakton d. 1-Keto-3-Aethoxyl-2-[2-Oxy-1,3-Diketo-2,3-Dihydro-2-Indenyl]-2,3-Dihydroinden-3-Carbonsäure. Sm. 138° (*B.* 35, 3962 *C.* 1903 [1] 33).  
 $C_{21}H_{14}N_4$  *C* 78,3 — *H* 4,3 — *N* 17,4 — *M. G.* 322.  
 1) Verbindung (aus d. Verb.  $C_{21}H_{14}ON_4$ ). Sm. 231° (*B.* 36, 1136 *C.* 1903 [1] 1254).  
 $C_{21}H_{15}N_3$  \*1) 2,4,6-Triphenyl-1,3,5-Triazin (*Soc.* 85, 262 *C.* 1904 [1] 1005).  
 5) p-Tolylindophenazin. Sm. 255–255,5° (*B.* 35, 4335 *C.* 1903 [1] 293).  
 $C_{21}H_{16}O$  12) 1,8-Dimethyl-4,5-Diisopropylxanthen. Sm. 164,5° (*C. r.* 136, 1567 *C.* 1903 [2] 383).  
 $C_{21}H_{16}O_3$  14) Lakton d. 3,3'-Dioxytriphenyllessigmonomethyläthersäure. Sm. 181° (*B.* 37, 4037 *C.* 1904 [2] 1600).  
 15) Methylester d. 3-Benzoylacenaphten-3'-Carbonsäure. Sm. 128° (*A.* 327, 100 *C.* 1903 [1] 1228).  
 $C_{21}H_{16}O_4$  15) Triphenyllessigsäure-4-Carbonsäure. Zers. bei 246–247°.  $Ag_2$  (*B.* 37, 662 *C.* 1904 [1] 952).  
 16) Dibenzoat d. 2,6-Dioxy-1-Methylbenzol. Sm. 101–103° (*M.* 24, 908 *C.* 1904 [1] 513).  
 $C_{21}H_{16}O_5$  7) 2-Keto-1,3-Dipiperonal-R-Pentamethylen. Sm. 250° (*B.* 36, 1504 *C.* 1903 [1] 1352).  
 $C_{21}H_{16}O_8$  \*9) Triacetat d. Emodin. Sm. 193° (*B.* 35, 609 *C.* 1903 [1] 176).  
 \*10) Triacetat d. 3,5,7-Trioxy-2-Phenyl-1,4-Benzpyron (Tr. d. Galangin). Sm. 140–142° (*B.* 37, 2806 *C.* 1904 [2] 713).  
 20) Triacetat d. 5,6-Dioxy-2-Keto-1-[2-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 160° (*B.* 29, 2433). — \*III, 533.  
 21) Triacetat d. 5,6-Dioxy-2-Keto-1-[3-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 166–167° (*B.* 29, 2433). — \*III, 533.  
 22) Triacetat d. 5,6-Dioxy-2-Keto-1-[4-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 199–201° (*B.* 29, 2434). — \*III, 533.  
 23) Triacetat d. Aloëmodin. Sm. 170° (*Ar.* 238, 434). — \*III, 325.  
 24) Triacetat d. 3,6-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 169° (*B.* 37, 784 *C.* 1904 [1] 1159).  
 25) Triacetat d. 3,7-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 169° (*B.* 37, 4161 *C.* 1904 [2] 1659).  
 26) Triacetat d. 3,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 153° (*B.* 37, 4163 *C.* 1904 [2] 1659).  
 27) Triacetat d. 3,7,8-Trioxy-2-Phenyl-1,4-Benzpyron. Sm. 210° (*B.* 37, 2809 *C.* 1904 [2] 713).  
 $C_{21}H_{16}N_2$  \*3) 1,3,5-Triphenylpyrazol. Sm. 139,5° (*C. r.* 136, 1264 *C.* 1903 [2] 123).  
 \*5) 2,4,5-Triphenylimidazol. Sm. 272° (*B.* 35, 4140 *C.* 1903 [1] 295).  
 15)  $\gamma$ -Phenylhydrazon- $\alpha\gamma$ -Diphenylpropin. Sm. 150° (*Soc.* 85, 1326 *C.* 1904 [2] 1645).

- $C_{21}H_{16}N_4$  4) 5-Benzylidenamido-1,4-Diphenyl-1,2,3-Triazol. Sm. 175° (*B.* 35, 4059 *C.* 1903 [1] 171).
- $C_{21}H_{17}N$  \*10) 3,7-Dimethyl-5-Phenylakridin. Sm. 172°. Bichromat (*B.* 36, 1020 *C.* 1903 [1] 1268).
- 11) 10-Methyl-5-Benzyliden-5,10-Dihydroakridin. Sm. 141° (*B.* 37, 1566 *C.* 1904 [1] 1447; *B.* 37, 3398 *C.* 1904 [2] 1317).
- $C_{21}H_{17}N_3$  10) 3,5-Diphenyl-1-[2-Methylphenyl]-1,2,4-Triazol<sup>P</sup> (*J. pr.* [2] 67, 484 *C.* 1903 [2] 250).
- 11) 3,5-Diphenyl-1-[4-Methylphenyl]-1,2,4-Triazol. Sm. 108—109° (*J. pr.* [2] 67, 487 *C.* 1903 [2] 250).
- $C_{21}H_{17}Cl$  2)  $\alpha$ -Chlor- $\alpha\gamma\gamma$ -Triphenylpropen. Sm. 91° (*Am.* 29, 358 *C.* 1903 [1] 1180; *Am.* 31, 644 *C.* 1904 [2] 445).
- $C_{21}H_{18}O$  \*2)  $\epsilon$ -Keto- $\alpha\alpha$ -Diphenyl- $\alpha\gamma\zeta$ -9-Nonatetraën. + 1(2)HCl, + 2FeCl<sub>3</sub> (*C.* 1903 [2] 284; *B.* 37, 3671 *C.* 1904 [2] 1569).
- 6)  $\gamma$ -Keto- $\alpha\alpha\gamma$ -Triphenylpropan. Sm. 96° (*Am.* 29, 354 *C.* 1903 [1] 1180; *Am.* 31, 649 *C.* 1904 [2] 446).
- $C_{21}H_{18}O_2$  \*9) Acetat d.  $\alpha$ -Oxytriphenylmethan. Sm. 87—88° (*B.* 36, 3926 *C.* 1904 [1] 96).
- 15)  $\gamma$ -Oxy- $\gamma\gamma$ -Diphenyl- $\alpha$ -[2-Oxyphenyl]propen. Sm. 164—166° (*B.* 37, 496 *C.* 1904 [1] 805).
- 16)  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\alpha\gamma$ -Triphenylpropan. Sm. 126—127° (*B.* 37, 2640 *C.* 1904 [2] 529).
- 17) Äethyläther d. 9-Oxy-9-Phenylxanthen. Sm. 102—103° (*B.* 37, 2934 *C.* 1904 [2] 1142).
- 18) Methylester d. Triphenylmethan-2-Carbonsäure. Sm. 98° (*C. r.* 139, 12 *C.* 1904 [2] 530).
- $C_{21}H_{18}O_3$  \*14) 4-Acetat d.  $\alpha$ ,4-Dioxytriphenylmethan. Sm. 139° (*B.* 36, 3252 *C.* 1903 [2] 884).
- $C_{21}H_{18}O_5$  \*4) norm. Propylester d. Pulvinsäure (*C.* 1903 [2] 121).
- 5) Diacetat d. stab.  $\gamma$ -Keto- $\alpha\epsilon$ -Di[4-Oxyphenyl]- $\alpha\delta$ -Pentadiën. Sm. 165—166° (*B.* 36, 131 *C.* 1903 [1] 457).
- $C_{21}H_{18}O_6$  \*5) Triacetat d. Chrysarobin. Sm. 238° (*Soc.* 81, 1579 *C.* 1903 [1] 34, 167).
- \*6)  $\beta$ -Trimethyläther d. Dehydrobrasilinmonacetat. Sm. 183—185° (*B.* 37, 631 *C.* 1904 [1] 955; *M.* 25, 881 *C.* 1904 [2] 1312).
- $C_{21}H_{18}O_8$  3) Triacetat d. 3,6-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 126 bis 127° (*B.* 37, 960 *C.* 1904 [1] 1160).
- 4) Triacetat d. Butin. Sm. 123—125° (*C.* 1903 [1] 1415; 1904 [2] 451).
- $C_{21}H_{18}N_2$  17) Di[2-Naphtylamido]methan. Sm. 104° (*B.* 35, 4169 *C.* 1903 [1] 172).
- 18) 3-[4-Dimethylamidophenyl]- $\beta$ -Naphtochinolin. Sm. 245° (*B.* 37, 1743 *C.* 1904 [1] 1599).
- 19) 3,7-Dimethyl-5-[3-Amidophenyl]akridin. Sm. 273° (*B.* 36, 1024 *C.* 1903 [1] 1268).
- 20) 3,7-Dimethyl-5-[4-Amidophenyl]akridin. Sm. 268° (*B.* 36, 1023 *C.* 1903 [1] 1268).
- $C_{21}H_{18}N_4$  10) 3-[Methylphenylamido]-1,5-Diphenyl-1,2,4-Triazol. Sm. 202—203° u. Zers. (*Am.* 29, 81 *C.* 1903 [1] 523).
- 11) 3-[4-Methylphenyl]amido-1,5-Diphenyl-1,2,4-Triazol. Sm. 227 bis 228° (*Am.* 29, 81 *C.* 1903 [1] 523; *Am.* 32, 367 *C.* 1904 [2] 1507).
- $C_{21}H_{19}N$  C 88,4 — H 6,7 — N 4,9 — M. G. 285.
- 1) 3,7-Dimethyl-5-Phenyl-5,10-Dihydroakridin (*B.* 36, 1020 *C.* 1903 [1] 1268).
- $C_{21}H_{19}N_3$  4) 4'-[4-Methylphenylimido]methyl-4-Methylazobenzol. Sm. 170—171° (*B.* 36, 2311 *C.* 1903 [2] 429).
- 5) 2,6-Di[ $\beta$ -4-Amidophenyläthenyl]pyridin. Sm. 146° (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (*B.* 36, 1689 *C.* 1903 [2] 47).
- $C_{21}H_{19}Cl$  1)  $\alpha$ -Chlor-4,4'-Dimethyltriphenylmethan. Sm. 106—107° (*B.* 37, 1631 *C.* 1904 [1] 1648).
- $C_{21}H_{20}O$  \*5) Äethyläther d. 4-Oxytriphenylmethan (*B.* 36, 3571 *C.* 1903 [2] 1375).
- 7)  $\beta$ -Oxy- $\alpha\beta\gamma$ -Triphenylpropan. Sm. 86—87° (*B.* 37, 1456 *C.* 1904 [1] 1353).
- 8)  $\alpha$ -Oxy-4,4'-Dimethyltriphenylmethan. Sm. 79—80° (*B.* 37, 1631 *C.* 1904 [1] 1648).

- $C_{21}H_{20}O$  9) Methyläther d. 4-Oxy-3-Methyltriphenylmethan. Sm. 80–81° (B. 36, 3562 C. 1903 [2] 1374).
- $C_{21}H_{20}O_2$  5)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyl- $\alpha$ -[4-Methylphenyl]äthan. Sm. 168° (B. 37, 2763 C. 1904 [2] 708).
- 6) Dimethyläther d. 3,4-Dioxytriphenylmethan. Sm. 110,5° (B. 37, 3333 C. 1904 [2] 1050).
- $C_{21}H_{20}O_3$  6) 3,4-Dimethyläther d.  $\alpha$ ,3,4-Trioxytriphenylmethan. Sm. 151,5° (B. 37, 3332 C. 1904 [2] 1050).
- 7) 4,4'-Dimethyläther d.  $\alpha$ ,4,4'-Trioxytriphenylmethan. Sm. 76–77° (B. 36, 2787 C. 1903 [2] 881).
- $C_{21}H_{20}O_4$  3) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]butan- $\beta$ -Ketocarbonsäure. Sm. 120° (A. 333, 240 C. 1904 [2] 1390).
- 4) isom. Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]butan- $\beta$ -Ketocarbonsäure. Sm. 158° (A. 333, 253 C. 1904 [2] 1391).
- $C_{21}H_{20}O_5$  2) 3,4-Dimethyläther d.  $\alpha$ ,3,4,3',4'-Pentaoxytriphenylmethan. Sm. 73–74° (B. 37, 3331 C. 1904 [2] 1050).
- 3) 2-Keto-1,3-Divanillal-R-Pentamethylen. Sm. 210° (B. 36, 1503 C. 1903 [1] 1352).
- 4) Lakton d.  $\epsilon$ -Keto- $\gamma$ -Acetoxyl- $\delta$ -Oxy- $\gamma$ - $\delta$ -Diphenylhexan- $\beta$ -Carbon-säure. Sm. 140° (Soc. 83, 299 C. 1903 [1] 878).
- $C_{21}H_{20}O_6$  \*1) Curcumin. K (Soc. 83, 140 C. 1903 [1] 89, 466; Soc. 85, 63 C. 1904 [1] 381, 729).
- 9)  $\alpha$ -Pentamethyläther d. Pentaoxybrasan. Sm. 167° (B. 36, 2201 C. 1903 [2] 382; B. 36, 3715 C. 1904 [1] 39).
- 10)  $\beta$ -Pentamethyläther d. Pentaoxybrasan. Sm. 174° (175–176°) (B. 36, 2205 C. 1903 [2] 382; B. 36, 3715 C. 1904 [1] 39).
- $C_{21}H_{20}O_7$  4)  $\gamma^b$ -Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphenyl]- $\alpha$ -[2,4-Dioxyphenyl]-propen- $\alpha^2, \alpha^4, \gamma^2, \gamma^4$ -Tetramethyläther. Sm. 118–119° (B. 37, 794 C. 1904 [1] 1159).
- 5)  $\gamma^b$ -Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]-propen- $\alpha^3, \alpha^4, \gamma^2, \gamma^4$ -Tetramethyläther. Sm. 107° (B. 37, 794 C. 1904 [1] 1158).
- 6) 3-Acetat d. 3,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron-2<sup>8</sup>, 2<sup>4</sup>-Dimethyläther-7-Aethyläther. Sm. 162–163° (B. 37, 789 C. 1904 [1] 1157).
- $C_{21}H_{20}O_8$  \*4) Barbaloin +  $1\frac{1}{2}(4)H_2O$  (B. [3] 27, 1225 C. 1903 [1] 401).
- \*5) Isobarbaloin +  $3(4)H_2O$  (C. 1903 [1] 235).
- 7) Acetat d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinonpentamethyl-äther. Sm. 179–180° (C. 1904 [2] 709).
- $C_{21}H_{20}N_2$  \*2)  $\alpha$ -Benzylimido- $\alpha$ -Methylphenylamido- $\alpha$ -Phenylmethan. Sm. 89 bis 90° (Soc. 83, 327 C. 1903 [1] 581, 876; B. 37, 2681 C. 1904 [2] 521).
- 14)  $\alpha$ -Phenylimido-4-Dimethylamidodiphenylmethan. Sm. 151° (D.R.P. 41751). — \*III, 150.
- 15)  $\alpha$ -[ $\beta$ -Phenyläthyliden]- $\beta$ -Phenyl- $\beta$ -Benzylhydrazin. Sm. 83° (C. r. 137, 717 C. 1903 [2] 1433).
- 16)  $\alpha$ -[2-Methylbenzyliden]- $\beta$ -Phenyl- $\beta$ -Benzylhydrazin. Sm. 87° (C. r. 137, 717 C. 1903 [2] 1433).
- 17)  $\alpha$ -[4-Methylbenzyliden]- $\beta$ -Phenyl- $\beta$ -Benzylhydrazin. Sm. 140° (C. r. 137, 717 C. 1903 [2] 1433).
- $C_{21}H_{21}N$  \*3) Tribenzylamin. Benzolsulfons. Salz (B. 37, 4137 C. 1904 [2] 1713).
- $C_{21}H_{22}O_8$  4) Aethylester d.  $\gamma$ -Benzoylmethyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 75–76° (C. 1903 [2] 944).
- $C_{21}H_{22}O_6$  9) Dimethyläther d. Verb.  $C_{10}H_{18}O_6$ . Sm. 131° (M. 24, 215 C. 1903 [2] 38).
- $C_{21}H_{22}O_7$  3) Triäthyläther d. Quercetin. Sm. 123–124°.  $K_2$  (Ar. 242, 238 C. 1904 [1] 1652).
- $C_{21}H_{22}O_8$  3) Acetylbarbatinsäure. Sm. 172° (J. pr. [2] 68, 14 C. 1903 [2] 511).
- $C_{21}H_{22}O_{10}$  2) Dibenzoylchitoheptonsäure. Sm. 117–120° (B. 35, 4022 C. 1903 [1] 392).
- $C_{21}H_{22}N_2$  10) 4,4'-Diamido-3,3'-Dimethyltriphenylmethan. Sm. 121–122° (C. 1904 [2] 227).
- 11) 4,4'-Di[Methylamido]triphenylmethan. Sm. 104° (B. 37, 639 C. 1904 [1] 950).

- $C_{21}H_{22}N_2$  12) Verbindung (aus 2-Methylindol u. Propionaldehyd). Sm. 180° (*B.* 36, 4326 *C.* 1904 [1] 462).
- $C_{21}H_{20}N_3$  7)  $\alpha$ -Imido- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha$ -[4-Aethylamido-1-Naphtyl]-methan. Sm. 199—200° HCl (*B.* 37, 1906 *C.* 1904 [2] 116).
- $C_{21}H_{24}O_2$  5) 1,8-Dimethyl-4,5-Diisopropylxanthon. Sm. 121° (*C. r.* 136, 1567 *C.* 1903 [2] 383).
- $C_{21}H_{24}O_4$  9) Diacetat d. 4,4'-Dioxy-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 154—155° (*B.* 36, 1891 *C.* 1903 [2] 291).
- $C_{21}H_{24}O_5$  2) Dimethyläther d. Anhydrolariciresinol. Sm. 148,5° (*M.* 23, 1028 *C.* 1903 [1] 288).
- 3) Aethyl ester d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-3,5-Diäthoxyphenyläthersäure. Sd. 263—264°<sub>17</sub> (*Soc.* 83, 1135 *C.* 1903 [2] 1060).
- $C_{21}H_{24}O_8$  2) Aldehyd d. Di[2,4,6-Trioxyphenyl]methan-3,3'-Dicarbonsäure. Sm. 154—155° (*M.* 24, 871 *C.* 1904 [1] 368).
- $C_{21}H_{24}O_{11}$  \*3) Tetracetylhelicin. Sm. 142° (*B.* 36, 2578 *C.* 1903 [2] 621).
- $C_{21}H_{24}N_2$  C 82,9 — H 7,9 — N 9,2 — M. G. 304.
- 1)  $\epsilon$ -[2,4-Dimethylphenyl]imido- $\alpha$ -[2,4-Dimethylphenyl]amido- $\alpha\gamma$ -Pentadien. Fl. HCl (*A.* 333, 325 *C.* 1904 [1] 1601).
- $C_{21}H_{26}N_5$  C 72,6 — H 7,2 — N 20,2 — M. G. 347.
- 1) 4-Amidophenyldi[4,6-Diamido-3-Methylphenyl]methan (*C.* 1903 [1] 884).
- $C_{21}H_{26}O_2$  3) 1-Menthylester d. Naphtalin-1-Carbonsäure. Sd. 231—232°<sub>11</sub> (*A.* 327, 196 *C.* 1903 [1] 1396).
- $C_{21}H_{26}O_6$  \*5) Dimethyläther d. isom. Lariciresinol. Sm. 167° (*M.* 23, 1025 *C.* 1903 [1] 288).
- $C_{21}H_{26}O_7$  2) Olivetorsäure (siehe auch  $C_{27}H_{36}O_8$ ). Sm. 141° (*J. pr.* [2] 68, 48 *C.* 1903 [2] 512).
- $C_{21}H_{26}N_4$  C 75,4 — H 7,8 — N 16,8 — M. G. 334.
- 1)  $\epsilon$ -[4-Dimethylamidophenyl]imido- $\alpha$ -[4-Dimethylamidophenyl]-amido- $\alpha\gamma$ -Pentadien. HBr (*J. pr.* [2] 70, 49 *C.* 1904 [2] 1236).
- $C_{21}H_{28}O_2$  5) Dimethyläther d.  $\alpha\alpha$ -Di[4-Oxyphenyl]heptan (*C.* 1904 [1] 1650).
- 6) 1-Menthylester d. 1,2-Dihydronaphtalin-4-Carbonsäure. Sd. 226 bis 227°<sub>12</sub> (*A.* 327, 197 *C.* 1903 [1] 1396).
- 7) 1-Menthylester d. 1,4-Dihydronaphtalin-1-Carbonsäure. Sm. 89—89,5° (*A.* 327, 198 *C.* 1903 [1] 1396).
- $C_{21}H_{28}O_3$  C 76,8 — H 8,5 — O 14,6 — M. G. 328.
- 1) 1-Menthylester d.  $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 133—134° (*Soc.* 85, 54 *C.* 1904 [1] 360, 788).
- $C_{21}H_{28}O_4$  C 73,3 — H 8,1 — O 18,6 — M. G. 344.
- 1) 1-Menthylester d.  $\beta$ -Acetoxyl- $\alpha$ -Phenylakrylsäure. Sm. 51—52° (*C.* 1902 [2] 208; *Soc.* 81, 1497 *C.* 1903 [1] 153). — \*III, 335.
- 2) 1-Menthylester d. Benzoylacetylessigsäure. Fl. Cu (*C.* 1902 [2] 208; *Soc.* 81, 1507 *C.* 1903 [1] 139). — \*III, 335.
- $C_{21}H_{28}O_8$  C 61,8 — H 6,8 — O 31,4 — M. G. 408.
- 1) Tetraäthylester d.  $\beta$ -Phenylpropan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sd. 225 bis 230°<sub>14</sub> (*J. pr.* [2] 68, 162 *C.* 1903 [2] 759).
- $C_{21}H_{28}O_{13}$  1) Triacetat d. Saponin (*Ar.* 241, 616 *C.* 1904 [1] 170).
- $C_{21}H_{28}S_8$  1) Triäthyläther d.  $\alpha\alpha\gamma$ -Trimerkapto- $\alpha\gamma$ -Diphenylpropan. Fl. (*B.* 34, 1403). — \*III, 169.
- $C_{21}H_{30}O_2$  2) Cannabinol. Sd. 215°<sub>0,5</sub> (*C.* 1903 [2] 199).
- 3) 1-Menthylester d. 1,2,3,4-Tetrahydronaphtalin-1-Carbonsäure. Sd. 207°<sub>10</sub> (*A.* 327, 200 *C.* 1903 [1] 1396).
- $C_{21}H_{30}O_8$  C 76,4 — H 9,1 — O 14,5 — M. G. 330.
- 1) Laricopininsäure. Sm. 80° (*Ar.* 241, 573 *C.* 1904 [1] 166).
- $C_{21}H_{30}O_9$  C 61,5 — H 7,3 — O 31,2 — M. G. 410.
- 1) Antiarin (siehe auch  $C_{27}H_{42}O_{10}$ ) (*C.* 1903 [1] 782).
- $C_{21}H_{30}O_{12}$  C 53,2 — H 6,3 — O 40,5 — M. G. 474.
- 1) Hexaäthylester d. R-Trimethylenhexacarbonsäure. Sd. 179—202°<sub>12</sub> (*J. pr.* [2] 68, 165 *C.* 1903 [2] 760).
- $C_{21}H_{32}O$  C 84,0 — H 10,7 — O 5,3 — M. G. 300.
- 1) Verbindung (aus Borneobresk). Sm. 125° (*B.* 37, 4114 *C.* 1904 [2] 1656).
- $C_{21}H_{32}O_4$  5) Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[2,4,5-Trioxyphenyl]- $\alpha$ -Dodeken. Sm. 97,5° (*Ar.* 242, 103 *C.* 1904 [1] 1008).
- $C_{21}H_{33}O$  1)  $\alpha$ -Takoresen. Sm. 93—95° (*Ar.* 242, 397 *C.* 1904 [2] 528).

- $C_{21}H_{34}O$  3) Laktukol. Sm. 154,5° (*C.* 1904 [1] 1162; *M.* 25, 789 *C.* 1904 [2] 1138).  
 $C_{21}H_{34}O_2$  2) Acetat d. Spongosterin. Sm. 124,5° (*H.* 41, 114 *C.* 1904 [1] 996).  
 $C_{21}H_{36}O$  2) Beljoresen. Sm. 168—170° (*Ar.* 240, 593 *C.* 1903 [1] 164).  
 $C_{21}H_{36}O_3$  C 75,0 — H 10,7 — O 14,3 — M. G. 336.  
 1) Cyklogallipharsäure. Sm. 89°. Ca, Ag, Pyridinsalz (*Ar.* 242, 257 *C.* 1904 [1] 1653).  
 $C_{21}H_{38}O_4$  C 71,2 — H 10,7 — O 18,1 — M. G. 354.  
 1) Methylester d. Acetylricinolsäure. Sd. 260°<sub>13</sub> (*B.* 36, 786 *C.* 1903 [1] 824).  
 2) Diäthylester d. Säure  $C_{17}H_{30}O_4$ . Sm. 26—27° (*Soc.* 85, 860 *C.* 1904 [2] 604).  
 $C_{21}H_{38}O_5$  C 68,1 — H 10,3 — O 21,6 — M. G. 370.  
 1) Diäthylester d. Säure  $C_{17}H_{30}O_5$ . Sm. 53° (*Soc.* 85, 861 *C.* 1904 [2] 604).  
 $C_{21}H_{40}O_2$  4) Gynocardiasäure. Sm. 29,5° (*C.* 1904 [1] 1607).  
 $C_{21}H_{40}O_3$  C 74,1 — H 11,8 — O 14,1 — M. G. 340.  
 1) Propylester d. Ricinolsäure. Sd. 268°<sub>13</sub> (*B.* 36, 784 *C.* 1903 [1] 823).  
 2) Isopropylester d. Ricinolsäure. Sd. 260°<sub>10</sub> (*B.* 36, 784 *C.* 1903 [1] 823).  
 $C_{21}H_{40}O_4$  \*3)  $\alpha$ -Oleat d.  $\alpha\beta\gamma$ -Trioxypyran. Sm. 35° (*C.* 1903 [1] 133; *B.* 36, 4343 *C.* 1904 [1] 434).  
 4) Phellogensäure. Sm. 121°.  $Na_2$  (*M.* 25, 284 *C.* 1904 [1] 1573).  
 5) Isophellogensäure. Sm. 100°.  $Na_2$  (*M.* 25, 289 *C.* 1904 [1] 1573).  
 $C_{21}H_{42}O_4$  \*1)  $\alpha$ -Stearat d.  $\alpha\beta\gamma$ -Trioxypyran. Sm. 78° (73°) (*C.* 1903 [1] 133; *B.* 36, 4343 *C.* 1904 [1] 434).

## — 21 III —

- $C_{21}H_{12}O_2N_2$  3) Azin (aus Morphenolchinon u. o-Toluyldiamin) (*B.* 33, 357). — \*III, 322.  
 $C_{21}H_{12}O_4N_2$  C 70,8 — H 3,4 — O 18,0 — N 7,8 — M. G. 356.  
 1) 2-[2-Nitrobenzyliden]amido-9,10-Anthrachinon. Sm. 216—218° (*C.* 1904 [1] 290).  
 2) 2-[3-Nitrobenzyliden]amido-9,10-Anthrachinon. Sm. 245—246° (*C.* 1904 [1] 290).  
 3) 2-[4-Nitrobenzyliden]amido-9,10-Anthrachinon. Sm. 246—249° (*C.* 1904 [1] 290).  
 $C_{21}H_{12}O_5N_2$  C 67,7 — H 3,2 — O 21,5 — N 7,5 — M. G. 372.  
 1) 9,10-Anthrachinon-2-Azosalicylsäure. Sm. 270° u. Zers. (*C.* 1904 [1] 289).  
 $C_{21}H_{12}O_7N_2$  3) 4,4'-Dinitro-1,1'-Dioxy-2,2'-Dinaphtylketon. Sm. 140° u. Zers. (*A.* 330, 105 *C.* 1904 [1] 1076).  
 $C_{21}H_{12}O_9N_2$  C 57,8 — H 2,7 — O 33,0 — N 6,4 — M. G. 436.  
 1) Aldehyd d. 3,4-Di[*p*-Nitrobenzoxyl]benzol-1-Carbonsäure (*B.* 36, 2930 *C.* 1903 [2] 888).  
 $C_{21}H_{13}ON$  5) Akridinderivat (aus Alizarinirisol) (*C.* 1904 [1] 101).  
 $C_{21}H_{13}OBr$  4) Dinaphtopyryloxoniumbromid (*C. r.* 136, 381 *C.* 1903 [1] 648).  
 $C_{21}H_{13}O_2N$  C 81,0 — H 4,2 — O 10,3 — N 4,5 — M. G. 311.  
 1) 2-Benzylidenamido-9,10-Anthrachinon. Sm. 185—187° (*C.* 1904 [1] 290).  
 $C_{21}H_{13}O_3N$  5) 2-[2-Oxybenzyliden]amido-9,10-Anthrachinon. Sm. 229—231° (*C.* 1904 [1] 290).  
 6) 2-[4-Oxybenzyliden]amido-9,10-Anthrachinon. Sm. 258° (*C.* 1904 [1] 290).  
 $C_{21}H_{13}O_4N$  3) 3-Phenyl- $\beta$ -Naphtochinolin-*p*-Dicarbonsäure<sup>p</sup> Sm. 215—220° (*C. r.* 139, 298 *C.* 1904 [2] 714).  
 $C_{21}H_{13}O_6Br$  1) 2,3-Lakton d. 1-Keto-3-Aethoxyl-2-[2-Brom-2-Oxy-1,3-Diketo-2,3-Dihydro-2-Indenyl]-2,3-Dihydroinden-3-Carbonsäure. Sm. 211° (*B.* 35, 3964 *C.* 1903 [1] 33).  
 $C_{21}H_{13}NCl_2$  1)  $\alpha$ -Naphtakridindichlorid. Sm. 158° (*Soc.* 85, 1204 *C.* 1904 [2] 1060).  
 $C_{21}H_{13}NJ_2$  1)  $\beta$ -Naphtakridindijodid. Sm. 270—273° (*Soc.* 85, 1205 *C.* 1904 [2] 1060).  
 $C_{21}H_{14}O_2N_2$  3) 6-Phenylazo-3-Phenyl-1,2-Benzpyron. Sm. 205° (*B.* 37, 4132 *C.* 1904 [2] 1736).

- $C_{21}H_{14}O_3N_2$  12) Amid d. 1,3-Diketo-2-Phenyl-1,3-Dihydroisindol-2<sup>2</sup>-Carbonsäure (Anilid d. o-Phthalimidobenzoësäure). Sm. 205° (*J. pr.* [2] 69, 27 *C.* 1904 [1] 641).
- 13) Verbindung (aus 2-Amidobenzol-1-Carbonsäure u. Benzol-1,2-Dicarbon-säureimid). Sm. 180° (*J. pr.* [2] 69, 26 *C.* 1904 [1] 641).
- $C_{21}H_{14}O_4Br_2$  1) Dibenzooat d. 3,5-Dibrom-2-Oxy-1-Oxymethylbenzol. Sm. 121—122° (*A.* 332, 200 *C.* 1904 [2] 211).
- $C_{21}H_{14}O_6N_2$  C 64,6 — H 3,6 — O 24,6 — N 7,2 — M. G. 390.
- 1) 4,4'-Dinitro-1,1'-Dioxy-2,2'-Dinaphtylmethan. Zers. oberh. 200° (*A.* 330, 104 *C.* 1904 [1] 1076).
- $C_{21}H_{14}N_3Br$  1) Brom-*p*-Tolyldinophenazin. Sm. 290—291° (*B.* 35, 4336 *C.* 1903 [1] 293).
- $C_{21}H_{15}ON$  \*3) 2,4,5-Triphenyloxazol. Sm. 115° (*B.* 35, 4137 *C.* 1903 [1] 295).
- \*7) 2-Oxy-1-[1-Naphtylimido]methylnaphtalin. Sm. 178° (*B.* 36, 1975 *C.* 1903 [2] 378).
- 11) 2-Oxy-1-[2-Naphtylimido]methylnaphtalin. Sm. 143° (*B.* 36, 1975 *C.* 1903 [2] 378).
- $C_{21}H_{15}OCl$  12) 7-Oxy-2,4-Diphenylchinolin. Sm. 272° (*B.* 36, 4017 *C.* 1904 [1] 293).
- 2)  $\gamma$ -Keto- $\beta\gamma$ -Diphenyl- $\alpha$ -[2-Chlorphenyl]propen. Sm. 113° (*B.* 35, 3970 *C.* 1903 [1] 31).
- 3) isom.  $\gamma$ -Keto- $\beta\gamma$ -Diphenyl- $\alpha$ -[2-Chlorphenyl]propen. Sm. 92° (*B.* 35, 3970 *C.* 1903 [1] 31).
- $C_{21}H_{15}O_2N$  9) 1-Benzylamido-9,10-Anthrachinon. Sm. 188° (D.R.P. 144634 *C.* 1903 [2] 750).
- 10) Laktone d. 5-Oxy-10-Methyl-5-Phenyl-5,10-Dihydroakridin-5<sup>2</sup>-Carbonsäure. Sm. 245° (*B.* 37, 1009 *C.* 1904 [1] 1276).
- 11) Betain d. 10-Methyl-5-Phenylakridin-5<sup>2</sup>-Carbonsäure. Sm. 245° (*B.* 37, 1010 *C.* 1904 [1] 1277).
- 12) Methylster d. 5-Phenylakridin-5<sup>2</sup>-Carbonsäure. Sm. 173°. HJ,  $H_2Cr_2O_7$ , Pikrat (*B.* 37, 1007 *C.* 1904 [1] 1276).
- $C_{21}H_{15}O_2N_3$  9) 2-[4-Methylamidophenylazo]-9,10-Anthrachinon. Sm. 202—204° (*C.* 1904 [1] 289).
- 10) Benzoat d. 5-Oxy-1,4-Diphenyl-1,2,3-Triazol. Sm. 132° (*A.* 335, 105 *C.* 1904 [2] 1232).
- $C_{21}H_{15}O_3N$  5) 4-[4-Methylphenylamido]-1-Oxy-9,10-Anthrachinon (Chinizarinblau) (*C.* 1904 [2] 339).
- $C_{21}H_{15}O_3N_3$  4) 2,4,6-Tri[4-Oxyphenyl]-1,3,5-Triazin. Sm. 357° corr. (*B.* 36, 3194 *C.* 1903 [2] 956).
- $C_{21}H_{15}O_4N_3$  C 67,5 — H 4,0 — O 17,2 — N 11,2 — M. G. 373.
- 1) 2,6-Di[ $\beta$ -4-Nitrophenyläthenyl]pyridin. Sm. 168—169°.  $HCl + H_2O$ , ( $HCl$ ,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), ( $HCl$ ,  $AuCl_3$ ), Pikrat (*B.* 36, 1688 *C.* 1903 [2] 47).
- $C_{21}H_{16}O_6N_5$  \*2) *m*-Trinitrohydrobenzamid (*C.* 1904 [1] 878).
- $C_{21}H_{16}O_6B$  1) Gem. Anhydrid d. Benzolcarbonsäure u. Borsäure. Sm. 145° (*B.* 36, 2224 *C.* 1903 [2] 421).
- $C_{21}H_{16}O_9N$  C 59,3 — H 3,5 — O 33,9 — N 3,3 — M. G. 425.
- 1) 4-Nitro- $\alpha,\beta,\beta$ -Trioxydiphenylmethan- $\beta$ -Dicarbonsäure (aus 4-Nitro-benzaldehyd u. Salicylsäure) (D.R.P. 75803). — \*II, 1213.
- $C_{21}H_{16}O_9B$  1) Gem. Anhydrid d. 2-Oxybenzol-1-Carbonsäure u. Borsäure. Sm. 258 bis 259° (*B.* 36, 2224 *C.* 1903 [2] 421).
- $C_{21}H_{16}ON_4$  \*1) 4-Phenylhydrazon-5-Keto-1,3-Diphenyl-4,5-Dihdropyrazol. Sm. 170° (*B.* 36, 1135 *C.* 1903 [1] 1254).
- 2) 3-Benzoylamido-1,5-Diphenyl-1,2,4-Triazol. Sm. 159—160°.  $HCl$ ,  $H_2SO_4$  (*Am.* 29, 77 *C.* 1903 [1] 523).
- 3) Verbindung (aus 4,5-Diketo-1,3-Diphenyl-4,5-Dihdropyrazol). Sm. 240 bis 241° (*B.* 36, 1135 *C.* 1903 [1] 1254).
- $C_{21}H_{16}OCl_2$  1)  $\gamma$ -Chlor- $\alpha$ -Keto- $\alpha\beta$ -Diphenyl- $\gamma$ -[2-Chlorphenyl]propan. Sm. 159° (*B.* 35, 3969 *C.* 1903 [1] 31).
- $C_{21}H_{16}O_2N_2$  10) 1-Methylamido-5-Phenylamido-9,10-Anthrachinon (D.R.P. 139581 *C.* 1903 [1] 680).
- 11) 1-Methylamido-8-Phenylamido-9,10-Anthrachinon (D.R.P. 139581 *C.* 1903 [1] 680).
- 12) 4-Amido-1-[4-Methylphenyl]amido-9,10-Anthrachinon (D.R.P. 125578; D.R.P. 148767 *C.* 1904 [1] 557).

- C<sub>21</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>** 13) 2-[ $\alpha$ -Phenylhydrazonäthyl]-3,4- $\beta$ -Naphtopyron ( $\alpha$ -Phenylhydrazonäthyl- $\beta$ -Naphtocumarin). Sm. 209—211° u. Zers. (B. 36, 1974 C. 1903 [2] 377).
- 14) 3,7-Dimethyl-5-[3-Nitrophenyl]akridin. Sm. 268° (B. 36, 1024 C. 1903 [1] 1268).
- 15) 3,7-Dimethyl-5-[4-Nitrophenyl]akridin. Sm. 265° (B. 36, 1023 C. 1903 [1] 1268).
- 16) Benzoat d. 2-[2-Oxymethylphenyl]indazol. Sm. 87,5° (C. r. 138, 1277 C. 1904 [2] 121).
- C<sub>21</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>** 9) Tribenzoylhydrazin. Sm. 206° (J. pr. [2] 69, 156 C. 1904 [1] 1274; J. pr. [2] 70, 274 C. 1904 [2] 1544; J. pr. [2] 70, 296, 300 C. 1904 [2] 1566).
- 10) 6-Oxyazobenzol-3-[ $\alpha$ -Phenylakrylsäure]. Sm. 247° (B. 37, 4133 C. 1904 [2] 1736).
- C<sub>21</sub>H<sub>16</sub>O<sub>3</sub>Br<sub>2</sub>** 3) Acetat d. 3,5-Dibrom- $\alpha$ ,4-Dioxytriphenylmethan. Sm. 171—172° (B. 34, 3078 C. 1903 [2] 884).
- C<sub>21</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>** 6) Dibenzoat d. 1,4-Dioximido-2-Methyl-1,4-Dihydrobenzol. Zers. bei 196° (G. 33 [1] 240 C. 1903 [1] 1409).
- C<sub>21</sub>H<sub>16</sub>O<sub>6</sub>Cl<sub>4</sub>** \*1) Tetrachlorbarbaloin +  $\frac{1}{2}$ H<sub>2</sub>O. Na<sub>3</sub> (C. 1903 [1] 234; Bl. [3] 27, 1227 C. 1903 [1] 401).
- 2) Tetrachlorisobarbaloin + 5H<sub>2</sub>O (C. 1903 [1] 235; C. r. 127, 236; Bl. [3] 23, 788). — \*III, 454.
- C<sub>21</sub>H<sub>16</sub>O<sub>6</sub>Br<sub>4</sub>** 1) Tetrabrombarbaloin + 4H<sub>2</sub>O (C. 1903 [1] 235). — \*III, 453.
- 2) Tetrabromisobarbaloin. Sm. 191° (B. 23 [2] 207; C. 1898 [2] 582; Bl. [3] 21, 670 Anm.; C. 1903 [1] 235). — \*III, 454.
- C<sub>21</sub>H<sub>16</sub>N<sub>2</sub>S** \*2) s-2,2-Dinaphtylthioharnstoff. Sm. 192—193°; Sd. 293° (C. r. 139, 451 C. 1904 [2] 1114).
- C<sub>21</sub>H<sub>16</sub>N<sub>3</sub>Cl** 1) 5-Imido-4-[4-Chlorphenyl]-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 149° (J. pr. [2] 67, 380 C. 1903 [1] 1356).
- 2) 1-[4-Chlor-2-Methylphenyl]-3,5-Diphenyl-1,2,4-Triazol. Sm. 103 bis 104° (J. pr. [2] 67, 502 C. 1903 [2] 251).
- C<sub>21</sub>H<sub>17</sub>ON** 8)  $\alpha$ -[oder  $\beta$ ]-Phenylamido- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen. Sm. 103—104° (Soc. 85, 1326 C. 1904 [2] 1645).
- 9) 3-Methyl-1,1-Diphenyl-2,4-Benzoxazin. Sm. 134,5—137° (B. 37, 3197 C. 1904 [2] 1472).
- C<sub>21</sub>H<sub>17</sub>ON<sub>3</sub>** 10) Verbindung (aus o-Amidobenzaldehyd) (B. 36, 835 C. 1903 [1] 1028).
- C<sub>21</sub>H<sub>17</sub>OBr** 1)  $\beta$ -Brom- $\gamma$ -Keto- $\alpha\alpha\gamma$ -Triphenylpropan. Sm. 173° (Am. 29, 358 C. 1903 [1] 1180; Am. 31, 652 C. 1904 [2] 446).
- C<sub>21</sub>H<sub>17</sub>O<sub>2</sub>N** \*1) Benzilimid. Sm. 138—139° (B. 35, 4138 C. 1903 [1] 295).
- \*9) 6-Benzoylamido-3-Methyldiphenylketon. Sm. 118° (Soc. 85, 596 C. 1904 [1] 1554).
- 12)  $\gamma$ -[3-Oxyphenyl]imido- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropen. Sm. 172° (B. 36, 4017 C. 1904 [1] 293).
- 13) Phenylamidodibenzoylmethan. Sm. 168—169° (B. 37, 2528 C. 1904 [2] 336).
- 14) Benzoyl-4-Methylbenzoylamidobenzol. Sm. 159—160° (C. r. 137, 714 C. 1903 [2] 1428).
- 15) 4-Benzoylamido-3-Methyldiphenylketon. Sm. 158° (Soc. 85, 593 C. 1904 [1] 1554).
- 16) o,p,ana-Trimethylchinophtalon. Sm. 284° (B. 37, 3017 C. 1904 [2] 1409).
- 17) o,p,ana-Trimethylisochinophtalon. Sm. 236° (B. 37, 3017 C. 1904 [2] 1409).
- 18) Benzoat d. 1-Oxy-2-[2-Pyridyl]-2,3-Dihydroinden. Sm. 36—37° (B. 36, 1656 C. 1903 [2] 39).
- 19) Phenylamidoformiat d. 2-Oxy- $\alpha\alpha$ -Diphenyläthen. Sm. 105° (und 86°) (B. 36, 4000 C. 1904 [1] 174).
- C<sub>21</sub>H<sub>17</sub>O<sub>3</sub>N<sub>3</sub>** \*6) s-Dibenzoylphenylguanidin. Sm. 187° (B. 37, 1683 C. 1904 [1] 1491).
- C<sub>21</sub>H<sub>17</sub>O<sub>3</sub>N** 20) Methylhydroxyd d. 5-Phenylakridin-5<sup>3</sup>-Carbonsäure. Jodhydrat, Bichromat, Pikrat (B. 37, 1010 C. 1904 [1] 1277).
- 21) Aethylester d. Naphtostyrylphenylessigsäure + H<sub>2</sub>O. Sm. 105—106° (111—112° wasserfrei) (B. 35, 4222 C. 1903 [1] 166).
- 22) Benzoat d. 3-Benzoylamido-1-Oxymethylbenzol. Sm. 113—114° (B. 37, 3941 C. 1904 [2] 1597).

- $C_{21}H_{17}O_3N$  23)  $\alpha$ -Benzoat d.  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 148° (Soc. 85, 453 C. 1904 [1] 954, 1445).  
 24)  $\beta$ -Benzoat d.  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 165—166° (Soc. 85, 451 C. 1904 [1] 954, 1445).  
 25) 2-Methylphenylamid d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 136° (A. 34 [1] 272 C. 1904 [1] 1499).  
 26) Phenyl-4-Methoxylbenzoylamid d. Benzolcarbonsäure. Sm. 162 bis 163° (Am. 30, 36 C. 1903 [2] 363).
- $C_{21}H_{17}O_3N_3$  6) N-Benzoat d.  $\alpha$ -Oximido- $\alpha$ -Phenylazo- $\alpha$ -[4-Oxyphenyl]methan-4-Methyläther. Sm. 129—129,5° (B. 36, 67 C. 1903 [1] 451).  
 7) Phenylamid d. 4-Benzoxyl-3-Methylphenylazoameisensäure. Sm. 150° u. Zers. (A. 334, 193 C. 1904 [2] 835).
- $C_{21}H_{17}O_5N_3$  3) 4-Methyläther d. 5-Nitro-3-Benzoxyl-4-Oxy-1-Phenylhydrazonmethylbenzol. Sm. 205—206° (B. 35, 4399 C. 1903 [1] 341).  
 4) Semicarbazon d. Verb.  $C_{20}H_{14}O_5$ . Sm. 239° (B. 36, 3233 C. 1903 [2] 941).  
 C 57,9 — H 3,9 — O 22,1 — N 16,1 — M. G. 435.
- $C_{21}H_{17}O_6N_5$  1)  $\alpha\alpha$ -Di[4-Nitrobenzyl]- $\beta$ -[2-Nitrobenzyliden]hydrazin. Sm. 120° (Z. 22, 439 C. 1904 [1] 15).
- $C_{21}H_{17}O_6Br$  1) Acetylbromtrimethyldehydrobrasilin. Sm. 271—274° (B. 36, 399 C. 1903 [1] 587). — \*III, 481.
- $C_{21}H_{17}O_6Br_3$  1) Tribrombarbaloin (C. 1903 [1] 235). — \*III, 453.
- $C_{21}H_{17}N_3S$  6) 1,5-Diphenyl-4-[2-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 249—250° u. Zers. (J. pr. [2] 67, 221 C. 1903 [1] 1261).  
 7) 1,5-Diphenyl-4-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 301—303° u. Zers. (J. pr. [2] 67, 220 C. 1903 [1] 1261).  
 8) 1,5-Diphenyl-4-Benzyl-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 236° (J. pr. [2] 67, 218 C. 1903 [1] 1260).  
 9) 4,5-Diphenyl-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 340° (J. pr. [2] 67, 258 C. 1903 [1] 1265).
- $C_{21}H_{18}ON_2$  17)  $\beta$ -Imido- $\beta$ -Phenylbenzoylamido- $\alpha$ -Phenyläthan. Sm. 110—111° (C. 1903 [2] 831).  
 18)  $\alpha$ -Phenylimido- $\alpha$ -Benzoylamido- $\alpha$ -[4-Methylphenyl]methan. Sm. 126° (C. 1903 [2] 831).  
 19)  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Benzoylamido- $\alpha$ -Phenylmethan. Sm. 111—113° (C. 1903 [2] 831).  
 20) N-Aethyl-o-Methylchinophthalin. Sm. 198° (B. 36, 3919 C. 1904 [1] 98).
- $C_{21}H_{18}ON_4$  4) Methyläther d. 3-[4-Oxyphenyl]amido-1,5-Diphenyl-1,2,4-Triazol. Sm. 224—225° (Am. 32, 368 C. 1904 [2] 1507).
- $C_{21}H_{18}OS$  3) Aethyläther d. 9-Oxy-9-Phenylthioxanthen. Sm. 76—77° (B. 37, 2937 C. 1904 [2] 1143).  
 4) Verbindung (aus Dibenzylsulfoxyd u. Benzaldehyd). Sm. 203° (B. 36, 544 C. 1903 [1] 707).
- $C_{21}H_{18}O_2N_2$  \*16)  $\alpha\beta$ -Dibenzoyl- $\alpha$ -Benzoylhydrazin. Sm. 152° (J. pr. [2] 70, 278 C. 1904 [2] 1545).  
 20) 4-Oxy-3-Benzoylphenylhydrazonmethyl-1-Methylbenzol. Sm. 155° (B. 35, 4107 C. 1903 [1] 150).  
 21)  $\alpha\epsilon$ -Diketo- $\gamma$ -Phenyl- $\alpha\epsilon$ -Di[2-Pyridyl]pentan. Sm. 152° (B. 35, 4062 C. 1903 [1] 91).  
 22) Benzoat d. 4-Oxy-3-Phenylhydrazonmethyl-1-Methylbenzol. Sm. 161° (B. 35, 4107 C. 1903 [1] 150).
- $C_{21}H_{18}O_2N_4$  14)  $\alpha$ -Imido- $\alpha$ -Benzoylamido- $\alpha$ -[ $\beta$ -Benzoyl- $\beta$ -Phenylhydrazido]methan. Sm. 156° (Am. 29, 79 C. 1903 [1] 523).
- $C_{21}H_{18}O_3S_2$  1) Dibenzyläther d. 3,6-Dimerkapto-2-Methyl-1,4-Benzochinon. Sm. 67—68° (A. 336, 166 C. 1904 [2] 1331).
- $C_{21}H_{18}O_5N_2$  13) 4-Methyläther d. 3-Benzoxyl-4-Oxy-1-Phenylhydrazonmethylbenzol. Sm. 187° (B. 35, 4399 C. 1903 [1] 341).  
 14) 4-Oxyazobenzol-2-[ $\alpha$ -Phenylpropionsäure]. Sm. 177° (B. 37, 4134 C. 1904 [2] 1736).  
 15) 4-Oxyazobenzol-3-[ $\alpha$ -Phenylpropionsäure]. Sm. 152—153° (B. 37, 4133 C. 1904 [2] 1736).  
 16) 6-Oxyazobenzol-3-[ $\alpha$ -Phenylpropionsäure]. Sm. 159° (B. 37, 4135 C. 1904 [2] 1736).

- $C_{21}H_{18}O_8N_2$  17) 8-[2-Oxy-1-Naphtyl]azo-1,2,3,4-Tetrahydronaphtalin-1-Carbonsäure (B. 35, 4224 C. 1903 [1] 166).  
 18) Säure (aus d. Verb.  $C_{23}H_{24}O_4N_2$ ). Sm. 180° (B. 36, 2125 C. 1903 [2] 365).  
 19) Phenylamid d.  $\alpha$ -Phenylamidoformoxyl- $\alpha$ -Phenyllessigsäure. Sm. 163° (Bl. [3] 29, 127 C. 1903 [1] 564).
- $C_{21}H_{18}O_8N_4$  2) 2-Oxy-3,5-Di[Phenylazo]benzol-1-Propionsäure. Sm. 194° (B. 37, 4130 C. 1904 [2] 1735).  
 3) 3-Oxy-4,6-Di[Phenylazo]benzol-1-Propionsäure. Sm. 179—180° (B. 37, 4131 C. 1904 [2] 1735).
- $C_{21}H_{18}O_4N_2$  6)  $\alpha$ -Di[Phthalylamido]pentan. Sm. 186° (B. 37, 3584 C. 1904 [2] 1407).
- $C_{21}H_{18}O_5N_4$  C 62,1 — H 4,4 — O 19,7 — N 13,8 — M. G. 406.  
 1)  $\alpha$ -Di[4-Nitrobenzyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 183° (R. 22, 430 C. 1903 [2] 15).
- $C_{21}H_{18}O_6N_2$  C 59,1 — H 4,2 — O 30,0 — N 6,6 — M. G. 426.  
 1) Diacetat d. 2-Keto-5,6-Dioxy-1-[3-Nitro-4-Dimethylamidobenzyliden]-1,2-Dihydrobenzofuran. Sm. 212° (B. 37, 825 C. 1904 [1] 1152).
- $C_{21}H_{18}NJ$  2) Jodmethylat d. 5-Benzylakridin (B. 37, 1565 C. 1904 [1] 1447).
- $C_{21}H_{18}N_6Cl_3$  1) trimolec. Anhydroformaldehyd-4-Chloranilin. Sm. 157° (B. 36, 47 C. 1903 [1] 505).  
 2) isom. trimolec. Anhydroformaldehyd-4-Chloranilin. Sm. 225° (B. 36, 47 C. 1903 [1] 505).
- $C_{21}H_{18}ON$  19) 4-Methylbenzylamidodiphenylketon. Sm. 78—79° (D.R.P. 41751). — \*III, 147.  
 20)  $\gamma$ -Oximido- $\alpha\alpha\gamma$ -Triphenylpropan. Sm. 131° (Am. 31, 650 C. 1904 [2] 446).  
 21) 2-Acetylamidotriphenylmethan. Sm. 154—155° (B. 37, 3199 C. 1904 [2] 1472).  
 22) Methylhydroxyd d. 5-Benzylakridin. Jodid, Pikrat (B. 37, 1565 C. 1904 [1] 1447).  
 23) Phenylamid d.  $\beta\beta$ -Diphenylpropionsäure. Sm. 167° (Am. 31, 651 C. 1904 [2] 446).
- $C_{21}H_{19}ON_8$  8)  $\alpha$ -Benzylidenamido- $\beta$ -Phenyl- $\alpha$ -Benzylharnstoff. Sm. 152° (B. 37, 2327 C. 1904 [2] 313).  
 9)  $\alpha$ -Benzylidenamido- $\alpha$ -[2-Methylphenyl]- $\beta$ -Phenylharnstoff. Sm. 118° (B. 36, 1371 C. 1903 [1] 1342).  
 10)  $\alpha$ -Benzylidenamido- $\alpha$ -[4-Methylphenyl]- $\beta$ -Phenylharnstoff. Sm. 176 bis 177° (B. 36, 1374 C. 1903 [1] 1343).
- $C_{21}H_{19}O_2N$  \*8)  $\beta$ -Benzoylamido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 235—236° (B. 37, 3942 C. 1904 [2] 1597).  
 11) isom.  $\beta$ -Benzoylamido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan (N-Benzoyliso-diphenyloxyäthylamin). Sm. 233° (B. 37, 3943 C. 1904 [2] 1597).  
 12)  $r$ - $\beta$ -[2-Oxybenzyliden]amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 113° (B. 36, 2342 Ann. C. 1903 [2] 410).  
 13)  $\alpha$ -Oxy-2-Acetylamidotriphenylmethan. Sm. 192° (B. 37, 3197 C. 1904 [2] 1472).  
 14) Acetyltriphenylmethylhydroxylamin. Sm. 98—102° (B. 37, 3152 C. 1904 [2] 1047).  
 15) Phenylester d. Dibenzylamidoameisensäure. Sd. 282—284°<sub>25</sub> (Bl. [3] 31, 21 C. 1904 [1] 508).  
 16) Phenylamidoformiat d. 2-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm. 99° (B. 36, 4009 C. 1904 [1] 175).  
 17) Phenylamidoformiat d. 4-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm. 111° (B. 36, 4013 C. 1904 [1] 176).  
 18) Phenylamidoformiat d. 4-Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 150° (B. 36, 4010 C. 1904 [1] 176).  
 19) Phenylamidoformiat d. Phenol  $C_6H_5O$ . Sm. 139° (B. 36, 3986 C. 1904 [1] 171).
- $C_{21}H_{19}O_2N_8$  10) 6-Phenylamido-3,4'-Dimethylazobenzol-6'-Carbonsäure? Sm. 226 bis 227° (D.R.P. 146950 C. 1903 [2] 1402; D.R.P. 150469 C. 1904 [1] 1115).  
 11) 4-Phenylamido-2',3-Dimethylazobenzol-4'-Carbonsäure? Sm. 217 bis 218° (D.R.P. 146950 C. 1903 [2] 1402; D.R.P. 150469 C. 1904 [1] 1115).

- $C_{21}H_{19}O_2Cl$  1) Dimethyläther d.  $\alpha$ -Chlor-3,4-Dioxytriphenylmethan. Sm. 148,5° (B. 37, 3333 C. 1904 [2] 1050).  
2) Dimethyläther d.  $\alpha$ -Chlor-4,4'-Dioxytriphenylmethan. Sm. 114 bis 115° (B. 36, 2787 C. 1903 [2] 882).
- $C_{21}H_{19}O_5N$  3) Acetat d.  $\gamma$ -Keto- $\gamma$ -[5-Diacetylamido-2-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 147° (B. 37, 2827 C. 1904 [2] 704).
- $C_{21}H_{19}O_6N$  4) Diacetat d. 5,6-Dioxy-2-Keto-1-[4-Dimethylamidobenzyliden]-1,2-Dihydrobenzofuran. Sm. 182° (215°) (B. 29, 2434; B. 37, 823 C. 1904 [1] 1151). — \*III, 532.
- $C_{21}H_{19}O_8N_3$  C 61,6 — H 4,6 — O 23,5 — N 10,3 — M. G. 409.  
1) Semicarbazon d. Verb.  $C_{20}H_{18}O_8$ . Sm. 265° u. Zers. (B. 36, 3232 C. 1903 [2] 941).
- $C_{21}H_{19}O_8N_5$  2) 2,4,6-Trinitro-3,5-Di[4-Methylphenylamido]-1-Methylbenzol. Sm. 185° (B. 23, 128 C. 1904 [2] 201).
- $C_{21}H_{19}O_8N$  2) Verbindung (aus d. Verb.  $C_{19}H_{14}O_4N$ ). Zers. bei 220—270° (G. 34 [1] 345 C. 1904 [2] 194).
- $C_{21}H_{19}NS$  1) 4-Benzylidenamido-3,4'-Dimethyldiphenylsulfid. HCl (J. pr. [2] 68, 288 C. 1903 [2] 995).
- $C_{21}H_{19}N_3S$  3)  $\alpha$ -Benzylidenamido- $\beta$ -Phenyl- $\alpha$ -Benzylthioharnstoff. Sm. 132° (B. 37, 2329 C. 1904 [2] 313).
- $C_{21}H_{19}N_3S_2$  1) Benzyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -Phenylimido- $\alpha$ -Merkapto-methan. Sm. 98—100° (Ann. 30, 177 C. 1903 [2] 872).
- $C_{21}H_{20}ON_2$  \*19)  $\beta$ -Benzoyl- $\alpha\alpha$ -Dibenzylhydrazin. Sm. 166—168° (A. 329, 364 C. 1904 [1] 442).  
20) Äthyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenylimido- $\alpha$ -Diphenylamidomethan (Äthylisotriphenylharnstoff). Sm. 48—50° (B. 37, 965 C. 1904 [1] 1002).  
21)  $\alpha\beta$ -Diphenyl- $\alpha$ -[ $\alpha$ -Phenyläthyl]harnstoff. Sm. 94—95° (B. 37, 2693 C. 1904 [2] 519).  
22)  $\alpha$ -Benzoyl- $\alpha\beta$ -Dibenzylhydrazin. Sm. 85—87° (A. 329, 364 C. 1904 [1] 442).  
23)  $\alpha$ -Benzoyl- $\alpha\beta$ -Di[2-Methylphenyl]hydrazin. Sm. 123,5—124° (C. r. 136, 1555 C. 1903 [2] 359).  
24)  $\alpha$ -Benzoyl- $\alpha\beta$ -Di[4-Methylphenyl]hydrazin. Sm. 189° (B. 36, 140 C. 1903 [1] 507).
- $C_{21}H_{20}ON_4$  \*5) 2-Oxy-3,5-Di[2-Methylphenylazo]-1-Methylbenzol. Sm. 146—147° (B. 37, 2575 C. 1904 [2] 658).
- $C_{21}H_{20}OCl_2$  1) Dicinnamylidenacetondihydrochlorid (B. 36, 1477 C. 1903 [1] 1348).
- $C_{21}H_{20}O_2N_2$  17) Dimethyläther d.  $\alpha$ -Phenylhydrazon- $\alpha\alpha$ -Di[4-Oxyphenyl]methan. Sm. 123—124° (B. 36, 655 C. 1903 [1] 768).
- $C_{21}H_{20}O_2N_4$  7) 4,4'-Di[Methylnitrosamido]triphenylmethan. Sm. 149° u. Zers. (B. 37, 641 C. 1904 [1] 950).  
8)  $\alpha$ -Phenylureido- $\beta$ -Phenyl- $\alpha$ -Benzylharnstoff. Sm. 222° (B. 37, 2326 C. 1904 [2] 312).
- $C_{21}H_{20}O_2N_6$  2) 1,4-Di[ $\beta$ -Phenylsemicarbazon]-2-Methyl-1,4-Dihydrobenzol. Zers. bei 246° (A. 334, 191 C. 1904 [2] 835).
- $C_{21}H_{20}O_2S_2$  1) 3,6-Dibenzyläther d. 3,6-Dimerkapto-2,5-Dioxy-1-Methylbenzol. Sm. 113° (A. 336, 165 C. 1904 [2] 1300).
- $C_{21}H_{20}O_3N_2$  2) Monophenylhydrazon d.  $\epsilon$ -Keto- $\delta$ -Acetyl- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Hexadien-3,4-Methylenäther. Sm. 160—161° (B. 37, 1700 C. 1904 [1] 1497).
- $C_{21}H_{20}O_3N_4$  C 67,0 — H 5,3 — O 12,8 — N 14,9 — M. G. 376.  
1)  $\alpha$ -Oxy-4,4'-Di[Methylnitrosamido]triphenylmethan. Sm. 159° u. Zers. (B. 37, 644 C. 1904 [1] 951).
- $C_{21}H_{20}O_6S$  1) 4,4'-Dioxytriphenylmethandimethyläther- $\alpha$ -Sulfonsäure. Na + H<sub>2</sub>O (B. 36, 2788 C. 1903 [2] 882).
- $C_{21}H_{20}NJ$  1) Jodmethylat d. 5,7-Diphenyl-2,3-Dihydro-4-Isobenzazol. Sm. 240 bis 241° u. Zers. (B. 35, 3977 C. 1903 [1] 37).
- $C_{21}H_{20}N_2S$  5)  $\alpha$ -Phenyl- $\beta\beta$ -Dibenzylthioharnstoff. Sm. 145—146° (Soc. 63, 539). — \*II, 1245.
- $C_{21}H_{20}N_4S_2$  2) 4-Methylphenyläther d.  $\alpha$ -Phenyl- $\beta$ -[4-Merkapto-2-Methylphenyl]-thioharnstoff. Sm. 143° (J. pr. [2] 68, 287 C. 1903 [2] 995).  
3) 4-Methylphenyläther d.  $\alpha$ -Phenyl- $\beta$ -[4-Merkapto-3-Methylphenyl]-thioharnstoff. Sm. 147° (J. pr. [2] 68, 293 C. 1903 [2] 995).

- $C_{21}H_{20}N_4S_2$  4) Methylester d.  $\alpha$ -Phenyl- $\alpha$ -[ $\alpha$ -Phenylhydrazonbenzyl]hydrazin- $\beta$ -Dithiocarbonsäure. Sm. 145–146° u. Zers. (*J. pr.* [2] 67, 235 *C.* 1903 [1] 1262).
- $C_{21}H_{21}ON$  4)  $\alpha$ -Oxy-2-Dimethylamidotriphenylmethan. Sm. 156–160°.  $HCl + H_2O$ , Pikrat (*B.* 37, 3204 *C.* 1904 [2] 1472).  
5)  $\alpha$ -Oxy-4-Dimethylamidotriphenylmethan. Sm. 92–93°. Oxalat (*B.* 37, 2857 *C.* 1904 [2] 775).  
6) 4-Diäthylamidophenyl-2-Naphtylketon. Sm. 74–75° (D.R.P. 52853). — \*III, 195.
- $C_{21}H_{21}ON_3$  6) 4-Methylphenylamid d. Di[Phenylamido]essigsäure (*A.* 332, 264 *C.* 1904 [2] 699).
- $C_{21}H_{21}OP$  1) Tribenzylphosphinoxid. Sm. 217° (*C. r.* 139, 675 *C.* 1904 [2] 1638).
- $C_{21}H_{21}O_2N_3$  \*4) 3'-Nitro-6',6'-Diamido-3',3'-Dimethyltriphenylmethan. Sm. 183° (123°?) (*B.* 36, 1024 *C.* 1903 [1] 1268).  
\*5) 4'-Nitro-6',6'-Diamido-3',3'-Dimethyltriphenylmethan. Sm. 172° (*B.* 36, 1022 *C.* 1903 [1] 1268).  
 $C$  69,4 —  $H$  5,8 —  $O$  13,2 —  $N$  11,6 —  $M. G.$  363.
- $C_{21}H_{21}O_3N_3$  1) 1-Phenylamid d. 6-Methyl-3-Phenyl-1,4-Dihydro-1,2-Diazin-1,3-Dicarbonsäure-5-Aethylester. Sm. 192° (*A.* 331, 314 *C.* 1904 [2] 46).
- $C_{21}H_{21}O_4N$  \*3) Dehydrocorybulbin +  $5H_2O$ . Sm. 175–178° (wasserfrei).  $HCl$ , (2HCl,  $PtCl_4$ ) (*Ar.* 241, 637 *C.* 1904 [1] 181).  
4) Dehydroisocorybulbin. *HJ* (*Ar.* 241, 651 *C.* 1904 [1] 182).  
5) Pseudopapaverin.  $HCl$ , (2HCl,  $PtCl_4$  +  $2H_2O$ ),  $HJ$  +  $3H_2O$  (*J. pr.* [2] 68, 196 *C.* 1903 [2] 838).
- $C_{21}H_{21}O_4N_3$  \*5) Methylester d. 3-Semicarbazon-2-Benzoyl-1-Phenyl-R-Pentamethylen-5-Carbonsäure. Sm. 232° (*A.* 326, 376 *C.* 1903 [1] 1126).  
 $C$  63,8 —  $H$  5,3 —  $O$  20,2 —  $N$  10,6 —  $M. G.$  395.
- $C_{21}H_{21}O_5N_3$  1) o-Nitranilinazodesmotroposantonin. Sm. 275° u. Zers. (*B.* 36, 1392 *C.* 1903 [1] 1360).
- $C_{21}H_{21}O_5Br_3$  1) 6-Acetat-2,4-Diäthyläther d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -[p-Brom-2,4,6-Trioxypheyl]- $\alpha$ -Phenylpropan. Sm. 169–170° u. Zers. (*B.* 32, 2266). — \*III, 168.
- $C_{21}H_{21}O_6N$  \*1) Hydrastin (*Soc.* 83, 617 *C.* 1903 [1] 590; *Ar.* 241, 269 *C.* 1903 [2] 447).  
\*4) Nitril d. Phenyl-o-Glykocumarsäure. Sm. 169–170° (*C.* 1903 [1] 89).
- $C_{21}H_{21}O_7N$  5) Acetylderivat d.  $\beta$ -Trimethylbrasilonoxim. Sm. 179–182° (*B.* 36, 398 *C.* 1903 [1] 587). — \*III, 480.
- $C_{21}H_{21}O_{10}N$  \*1) Acetylnitrotrimethylbrasilon (*M.* 25, 889 *C.* 1904 [2] 1313).
- $C_{21}H_{21}ClSn$  1) Zinntribenzylchlorid. Sm. 127–130° (*B.* 37, 321 *C.* 1904 [1] 637).
- $C_{21}H_{22}ON_2$  4)  $\alpha$ -Oxy-4,4'-Di[Methylamido]triphenylmethan. Sm. 95°. (2HCl,  $ZnCl_2$  +  $H_2O$ ) (*B.* 37, 643 *C.* 1904 [1] 951).  
5) Äthyläther d.  $\alpha$ -[4-Oxyphenyl]imido- $\alpha$ -Dimethylamido- $\alpha$ -[1-Naphtyl]methan. Sm. 150° (*B.* 37, 2685 *C.* 1904 [2] 522).  
6) 4-Dimethylamidophenyl-4-Aethylamido-1-Naphtylketon. Sm. 156 bis 157° (162°) (D.R.P. 84655; *C.* 1903 [1] 87; *B.* 37, 1902 *C.* 1904 [2] 115).
- $C_{21}H_{22}OSn$  1) Zinntribenzylhydroxyd (*B.* 37, 322 *C.* 1904 [1] 637).
- $C_{21}H_{22}O_2N_2$  \*1) Strychnin. Nitroprussidwasserstoffsaltz (*C.* 1903 [2] 385).  
5) Oxim d. Ketoapocinchenäthyläther. Sm. 181–184° (*J. pr.* [2] 61, 26). — \*III, 634.
- $C_{21}H_{22}O_3N_2$  2) Anilinazodesmotroposantonin. Sm. 260° (*B.* 36, 1391 *C.* 1903 [1] 1359).
- $C_{21}H_{22}O_4Br_2$  1) Diacetat d. 3,3'-Dibrom-4,4'-Dioxy-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 178–179° (*B.* 36, 1891 *C.* 1903 [2] 291).
- $C_{21}H_{22}O_6N_2$  2)  $\alpha s$ -Di[Benzoylamido]pentan-2,2'-Dicarbonsäure (Pentamethyldiphtalaminsäure). Sm. 156° u. Zers. (*B.* 37, 3586 *C.* 1904 [2] 1407).  
3) Triacetylderivat d. Verb.  $C_{15}H_{15}O_3N_2$ . Sm. 166–167° (*J. pr.* [2] 70, 373 *C.* 1904 [2] 1566).  
 $C$  44,2 —  $H$  3,8 —  $O$  22,5 —  $N$  29,5 —  $M. G.$  570.
- $C_{21}H_{22}O_6N_{12}$  1) Hydraziazid d. Hippurylasparagylasparaginsäure (*J. pr.* [2] 70, 190 *C.* 1904 [2] 1397).
- $C_{21}H_{22}NCl$  1) Methylphenyldibenzylammoniumchlorid. Sm. 159–161° (*Soc.* 83, 1410 *C.* 1904 [1] 438).
- $C_{21}H_{22}NJ$  2) Methylphenyldibenzylammoniumjodid. Sm. 134–135° (*Soc.* 83, 1410 *C.* 1904 [1] 438).

- $C_{21}H_{23}ON$  2) Methylphenyldibenzylammoniumhydroxyd. d-Camphersulfonat (*Soc.* 83, 1411 *C.* 1904 [1] 438).
- $C_{21}H_{23}O_2N$  2) Methyläther d.  $\gamma$ -Keto- $\alpha$ -[oder  $\beta$ ]-[1-Piperidyl]- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 127° (*Soc.* 85, 1325 *C.* 1904 [2] 1645).
- $C_{21}H_{23}O_2N_5$  2) 4-Nitrophenyldi[4,6-Diamido-3-Methylphenyl]methan. Sm. 265° (*C.* 1903 [1] 884).
- $C_{21}H_{23}O_3N$  2) Aethylester d.  $\alpha$ -Phenylimido- $\beta$ -Acetyl- $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 162° (D.R.P. 33497). — \*II, 1080.
- $C_{21}H_{23}O_4N$  8) Tetramethyläther d. 6,7-Dioxy-2-Methyl-1-[3,4-Dioxybenzyliden]-1,2-Dihydroisochinolin (N-Methylisopapaverin). Sm. 129—131°. HCl, Pikrat (*B.* 37, 525 *C.* 1904 [1] 818).
- 9) Anhydromethylcotarninacetophenon. Sm. 78°. HJ (*B.* 37, 2749 *C.* 1904 [2] 546).
- 10) Aethylester d. Anhydrohydrastininphenylessigsäure. Sm. 85—86° (*B.* 37, 2739 *C.* 1904 [2] 544).
- $C_{21}H_{23}O_5N$  \*1)  $\beta$ -Homochelidonin. Sm. 159° (*C.* 1903 [1] 1142).
- $C_{21}H_{23}O_5N_3$  2) Methylhydroxyd d. Diazopapaverin. Sm. 170°. Jodid, Methylsulfat (*B.* 37, 1935 *C.* 1904 [2] 129).
- 3) p-Nitranilinoazo-d-Santonigesäure. Sm. 175° (*B.* 36, 1394 *C.* 1903 [1] 1360).
- $C_{21}H_{23}O_6N$  4) Methylster d. Acetylmorphinkohlensäure. Sm. 168° (D.R.P. 106718 *C.* 1900 [1] 1085). — \*III, 670.
- $C_{21}H_{24}O_2N_2$  \*13) Acetylalloeinchonin (*M.* 24, 329 *C.* 1903 [2] 578).
- $C_{21}H_{24}O_3N_2$  7) Anilinoazo-d-Santonigesäure. Sm. 250° (*B.* 36, 1394 *C.* 1903 [1] 1360).
- 8) Anilinoazodesmotroposantonigesäure. Sm. 218° (*B.* 36, 1393 *C.* 1903 [1] 1360).
- 9) Benzoat d.  $\delta$ -Oximido- $\beta$ -Benzoylmethylamido- $\beta$ -Methylpentan. Sm. 100—103° (*M.* 24, 778 *C.* 1904 [1] 158).
- $C_{21}H_{24}O_5N_2$  5) Aethylester d. 4,5,6-Trioxo-2-[ $\beta$ -Methylamidoäthyl]-1-Phenylimidomethylbenzol-6-Methyläther-4,5-Methylenäther-14-Carbonsäure (Ac. d. Cotarninanil-4-Carbonsäure). Sm. 147° (*B.* 36, 1528 *C.* 1903 [2] 51).
- $C_{21}H_{24}O_7N_2$  3) Methylhydroxyd d. 6,7-Dioxy-1-[6-Nitro-3,4-Dioxybenzyl]isochinolintetramethyläther (M. d. Nitropapaverin). Salze siehe (*B.* 37, 1931 *C.* 1904 [2] 128).
- $C_{21}H_{24}O_{12}N_4$  C 48,1 — H 4,6 — O 36,6 — N 10,7 — M. G. 524.
- 1) Hippurylasparagylasparaginsäure. Sm. 100° u. Zers. Ba<sub>2</sub>, Pb, Ag<sub>4</sub> (*J. pr.* [2] 70, 184 *C.* 1904 [2] 1397).
- $C_{21}H_{25}O_3N_3$  3) Isonitrosomethylchinin. Sm. 90—100° (*B.* 33, 3236). — \*III, 629.
- $C_{21}H_{25}O_4N_3$  \*1) Corybulbin. Sm. 237—238°. HCl, (HCl, AuCl<sub>3</sub>) (*Ar.* 241, 634 *C.* 1904 [1] 180; *Soc.* 83, 625 *C.* 1903 [1] 1364).
- \*11) i-Corybulbin. Sm. 220—222°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*Ar.* 241, 647 *C.* 1904 [1] 181).
- \*12) d-Isocorybulbin. Sm. 179—180° (*Ar.* 241, 650 *C.* 1904 [1] 182).
- 14) i-Isocorybulbin. Sm. 165—167° (*Ar.* 241, 651 *C.* 1904 [1] 182).
- $C_{21}H_{25}O_4N_5$  C 65,8 — H 6,5 — O 16,7 — N 11,0 — M. G. 383.
- 1) Verbindung (aus Disazobenzolsantonsäure). (2HCl, SnCl<sub>4</sub>) (*B.* 36, 1395 *C.* 1903 [1] 1360).
- $C_{21}H_{25}O_4N_5$  C 61,3 — H 6,1 — O 15,6 — N 17,0 — M. G. 411.
- 1) Phenylamid d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amido-äthylamidoameisensäure. Sm. 226° (*J. pr.* [2] 70, 127 *C.* 1904 [2] 1037).
- $C_{21}H_{26}O_6N$  C 65,1 — H 6,5 — O 24,8 — N 3,6 — M. G. 387.
- 1) Papaveramin. Sm. 128—129°. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (*J. pr.* [2] 68, 204 *C.* 1903 [2] 839).
- $C_{21}H_{26}O_6N_3$  C 60,7 — H 6,0 — O 23,1 — N 10,1 — M. G. 415.
- 1) Nitroderivat d. Propan- $\alpha$  $\beta$ -Dicarbonsäuredi[4-Aethoxyphenylamid]. Sm. 195° (*G.* 34 [2] 271 *C.* 1904 [2] 1454).
- $C_{21}H_{26}N_2Br$  1) 2,4-Dimethylbromophenylat d. 2-[2,4-Dimethylphenyl]amido-1,2-Dihydropyridin. Sm. 153° (*J. pr.* [2] 69, 125 *C.* 1904 [1] 815).
- $C_{21}H_{26}ON_2$  6)  $\alpha$ -[1-Naphtyl]- $\beta$ -Bornylharnstoff (*Soc.* 85, 1191 *C.* 1904 [2] 1125).
- $C_{21}H_{26}O_2N_4$  3) Aethylester d.  $\beta$  $\epsilon$ -Di[Phenylhydrazon]hexan- $\gamma$ -Carbonsäure. Zers. bei 130° (*B.* 37, 2192 *C.* 1904 [2] 240).

- $C_{21}H_{26}O_4N_2$  6) Di[4-Aethoxyphenylamid] d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 234 bis 235° (*G.* 34 [2] 269 *C.* 1904 [2] 1454).  
 $C_{21}H_{26}O_4N_4$  C 63,3 — H 6,5 — O 16,1 — N 14,1 — M. G. 398.  
 1) Pyramidonorthoform. Sm. 76° (*A.* 325, 320 *C.* 1903 [1] 769).  
 2) isom. Pyramidonorthoform. Sm. 65–66° (*A.* 325, 320 *C.* 1903 [1] 769).  
 $C_{21}H_{26}O_5N_4$  C 60,9 — H 6,3 — O 19,3 — N 13,5 — M. G. 414.  
 1) Diäthylester d. Diphenylcarbaziddiessigsäure. Sm. 114–115° (*B.* 36, 3889 *C.* 1904 [1] 28).  
 $C_{21}H_{26}O_5S_2$  3)  $\alpha$ -Keto- $\gamma\epsilon$ -Diäthylsulfon- $\alpha\epsilon$ -Diphenylpentan. Fl. (*B.* 37, 510 *C.* 1904 [1] 884).  
 $C_{21}H_{27}O_2N$  C 77,5 — H 8,3 — O 9,8 — N 4,3 — M. G. 325.  
 1) Phenylamidoformiat d. 5-[ $\alpha$ -Oxyäthyl]-1,2,4-Triäthylbenzol. Sm. 75–76° (*B.* 36, 1635 *C.* 1903 [2] 26).  
 $C_{21}H_{27}O_3N$  \* 1) d-Laudanosin (*Soc.* 83, 626 *C.* 1903 [1] 591).  
 $C_{21}H_{27}O_5N$  C 67,6 — H 7,2 — O 21,4 — N 3,8 — M. G. 373.  
 1) Aethylaurotetanin. Sm. 127–130°. *HJ.* (*A.* 236, 615). — \*III, 661.  
 $C_{21}H_{27}O_8N_8$  C 56,1 — H 6,0 — O 28,5 — N 9,4 — M. G. 449.  
 1) Trinitrocannabinol (*C.* 1903 [2] 199).  
 $C_{21}H_{28}O_4N_2$  C 67,7 — H 7,5 — O 17,2 — N 7,5 — M. G. 372.  
 1) Tetramethyläther d. 6,7-Dioxy-1-[6-Amido-3,4-Dioxybenzyl]-2-Methyl-1,2,3,4-Tetrahydroisochinolin (Amidotetrahydro-N-Methylpapaverin). Sm. 145° (*B.* 37, 1940 *C.* 1904 [2] 130).  
 $C_{21}H_{28}O_4N_4$  C 63,0 — H 7,0 — O 16,0 — N 14,0 — M. G. 400.  
 1) 2,2'-Dinitro-4,4'-Di[Diäthylamido]diphenylmethan. Sm. 121–121,5° (*D.R.P.* 139989 *C.* 1903 [1] 798).  
 $C_{21}H_{28}O_8N_4$  C 54,3 — H 6,0 — O 27,6 — N 12,1 — M. G. 464.  
 1) Diäthylester d. Hippurylasparagylidiamidoessigsäure. Sm. 195° (*J. pr.* [2] 70, 193 *C.* 1904 [2] 1398).  
 $C_{21}H_{28}O_8N_6$  C 51,2 — H 5,7 — O 26,0 — N 17,1 — M. G. 492.  
 1) Aethyl ester d. Benzoylpenta[Amidoacetyl]amidoessigsäure. Sm. 263° u. Zers. (258–263°) (*B.* 37, 1282 *C.* 1904 [1] 1335; *J. pr.* [2] 70, 100 *C.* 1904 [2] 1035).  
 $C_{21}H_{30}ON_2$  \* 1)  $\alpha$ -Oxy-4,4'-Di[Diäthylamido]triphenylmethan. (2HCl, ZnCl<sub>2</sub>) (*B.* 37, 3061 *C.* 1904 [2] 990).  
 $C_{21}H_{30}O_8N_2$  C 70,4 — H 8,4 — O 13,4 — N 7,8 — M. G. 358.  
 1) Mentylester d.  $\alpha$ -[4-Methylphenyl]azoacetyllessigsäure. Sm. 86 bis 87° (*Soc.* 83, 1121 *C.* 1903 [2] 23, 791).  
 $C_{21}H_{31}O_2N$  \* 1) Mentylester d.  $\beta$ -Benzylamidopropen- $\alpha$ -Carbonsäure. Sm. 85–86° (*Soc.* 81, 1505 *C.* 1903 [1] 138).  
 $C_{21}H_{31}O_{18}N_3$  C 47,3 — H 5,8 — O 39,0 — N 7,9 — M. G. 533.  
 1) Säure (aus Guttapercha) oder  $C_{34}H_{44}O_{21}N_6$  (*C.* 1903 [1] 83).  
 $C_{21}H_{32}O_5Cl_2$  1) Dianisalcyclopentanondihydrochlorid (*B.* 36, 1477 *C.* 1903 [1] 1348).  
 $C_{21}H_{32}O_8N_{12}$  C 43,4 — H 5,5 — O 22,1 — N 29,0 — M. G. 580.  
 1) Hydrazid d. Hippurylasparagylasparaginsäure. Sm. 176° u. Zers. (*J. pr.* [2] 70, 189 *C.* 1904 [2] 1397).  
 $C_{21}H_{33}O_4N$  C 69,4 — H 9,1 — O 17,6 — N 3,9 — M. G. 363.  
 1) 2,4,5-Trimethyläther d.  $\gamma$ -Oximido- $\alpha$ -[2,4,5-Trioxypheyl]- $\alpha$ -Dodeken. Sm. 86° (*Ar.* 242, 103 *C.* 1904 [1] 1008).  
 $C_{21}H_{33}O_4N_3$  C 64,5 — H 8,4 — O 16,4 — N 10,7 — M. G. 391.  
 1)  $\alpha$ -[ $\alpha$ -( $\alpha$ -Amidoisocapronyl)amidoisocapronyl]amido- $\beta$ -Phenylpropionsäure + 2H<sub>2</sub>O. Sm. 225–227° (*B.* 37, 3311 *C.* 1904 [2] 1306).  
 $C_{21}H_{34}O_9N_6$  \* 1)  $\alpha$ -Pepsinfibrinpepton (Säure aus Fibrin) (*H.* 38, 258 *C.* 1903 [2] 210; *H.* 38, 291 *C.* 1903 [2] 211).  
 $C_{21}H_{35}O_5Br_3$  1) Tribromdihydrocyklogallipharsäure. Sm. 61° (*Ar.* 242, 265 *C.* 1904 [1] 1654).  
 $C_{21}H_{36}ON_2$  C 75,9 — H 10,8 — O 4,8 — N 8,4 — M. G. 332.  
 1) d- $\alpha\beta$ -Dibornylharnstoff. Sm. noch nicht bei 290° (*Soc.* 85, 687 *C.* 1904 [2] 332).  
 $C_{21}H_{36}O_{10}N_8$  \* 1)  $\beta$ -Pepsinfibrinpepton (Säure aus Fibrin) (*H.* 38, 258 *C.* 1903 [2] 210; *H.* 38, 296 *C.* 1903 [2] 211).  
 $C_{21}H_{36}N_2S$  \* 1) s-Dibornylthioharnstoff. Sm. 227° (*C.* 1904 [1] 1605; *Soc.* 85, 1193 *C.* 1904 [2] 1125).  
 $C_{21}H_{37}O_8N_2$  1) Samandatrin. H<sub>2</sub>SO<sub>4</sub> (*C.* 1904 [2] 130).

- $C_{21}H_{39}O_8N_9$  C 46,2 — H 7,2 — O 23,5 — N 23,1 — M. G. 545.  
 1) Glutokyrin.  $2 + 5H_2SO_4$  (C. 1903 [1] 1145; 1903 [2] 580; H. 43, 44 C. 1904 [2] 1660).  
 $C_{21}H_{40}ON_2$  C 75,0 — H 11,9 — O 4,8 — N 8,3 — M. G. 336.  
 1) 1- $\alpha\beta$ -Dimethylharnstoff. Sm. 258° (Soc. 85, 690 C. 1904 [2] 332).

## — 21 IV —

- $C_{21}H_{19}O_6NS_2$  1)  $\alpha$ -Naphtakridin-2,11-Disulfonsäure. Na<sub>2</sub> (B. 35, 4175 C. 1903 [1] 173).  
 2)  $\beta$ -Naphtakridin-3,10-Disulfonsäure. Ag<sub>2</sub> (B. 35, 4173 C. 1903 [1] 173).  
 $C_{21}H_{14}O_2NBr$  1) 2-Brom-4-[4-Methylphenyl]amido-1,3-Dioxy-9,10-Anthrachinon (D.R.P. 153517 C. 1904 [2] 752).  
 $C_{21}H_{14}O_3NCl$  1) Chlormethylamidofluoran. Sm. 168° (D.R.P. 139727 C. 1903 [1] 796).  
 $C_{21}H_{14}O_6NBr$  1) 2-Brom-4-[4-Methylphenyl]amido-1-Oxy-9,10-Anthrachinon (D.R.P. 127532 C. 1902 [1] 287). — \*III, 301.  
 $C_{21}H_{14}O_6N_2S$  1) 6-Phenylazo-3-Phenyl-1,2-Benzpyron-6'-Sulfonsäure (B. 37, 4132 C. 1904 [2] 1736).  
 $C_{21}H_{15}O_2N_2Br$  1) 2-Brom-1-Amido-4-[4-Methylphenyl]amido-9,10-Anthrachinon (C. 1904 [2] 340).  
 $C_{21}H_{15}O_4N_8Br_4$  1) 2,6-Di[ $\alpha\beta$ -Dibrom- $\beta$ -4-Nitrophenyläthyl]pyridin. Sm. 252° (B. 36, 1688 C. 1903 [2] 47).  
 $C_{21}H_{15}O_6NS$  1) 4-[4-Methylphenyl]amido-1-Oxy-9,10-Anthrachinon-4<sup>2</sup>-oder-4<sup>3</sup>-Sulfonsäure (Alizariniriso) (C. 1904 [1] 101).  
 $C_{21}H_{15}N_8ClBr$  1) Nitril d.  $\beta$ -[4-Bromphenyl]hydrazon- $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylpropionsäure. Sm. 144° (J. pr. [2] 67, 383 C. 1903 [1] 1356).  
 $C_{21}H_{16}O_2NJ$  1) Jodmethylat d. 5-Phenylakridin-5<sup>2</sup>-Carbonsäure + H<sub>2</sub>O. Sm. 257—260° (B. 37, 1010 C. 1904 [1] 1277).  
 $C_{21}H_{16}O_8NCl$  1)  $\gamma$ -Chlor- $\alpha$ -Keto- $\gamma$ -[3-Nitrophenyl]- $\alpha\beta$ -Diphenylpropan. Sm. 166—167° (Soc. 83, 1377 C. 1904 [1] 164, 450).  
 $C_{21}H_{16}O_6N_2S$  2) Verbindung (aus 1-Amidobenzthiazol u. Benzoësäureanhydrid). Sm. 156° (B. 36, 3136 C. 1903 [2] 1071).  
 $C_{21}H_{16}N_3BrS$  1) 1-Phenyl-5-[4-Bromphenyl]-4-Benzyl-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid? Sm. 218° (J. pr. [2] 67, 238 C. 1903 [1] 1263).  
 $C_{21}H_{17}O_2NS$  1) 3,4-Methylenäther d. 4'-[3,4-Dioxybenzyliden]amido-4-Methyldiphenylsulfid. Sm. 95° (J. pr. [2] 68, 273 C. 1903 [2] 993).  
 $C_{21}H_{17}O_2N_2Cl$  4)  $\beta$ -Phenylhydrazon- $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylpropionsäure. Sm. 130° (J. pr. [2] 67, 386 C. 1903 [1] 1357).  
 $C_{21}H_{17}O_6N_3S$  1) Laktam d. ?-Dinitro- $\alpha$ -Oxytriphenylmethan-2-Sulfonsäure-äthylamid. Sm. 220—230° (B. 37, 3263 C. 1904 [2] 1031).  
 $C_{21}H_{17}O_6NS_2$  1) Verbindung (aus d. Suprarenintribenzolsulfonat) (M. 24, 281 C. 1903 [2] 302). — \*III, 667.  
 $C_{21}H_{18}O_3N_3Br$  1) Äthyläther d. 3'-Brom-4'-[3-Nitrobenzyliden]amido-4-Oxydiphenylamin. Sm. 137—138° (B. 36, 3866 C. 1904 [1] 91).  
 $C_{21}H_{18}O_6N_2S$  1) 4-Oxyazobenzol-3-[ $\alpha$ -Phenylpropionsäure]-4'-Sulfonsäure (B. 37, 4134 C. 1904 [2] 1736).  
 $C_{21}H_{18}N_3ClS$  1)  $\alpha$ -[2-Methylphenyl]amidothioformylimido- $\alpha$ -[4-Chlorphenyl]-amido- $\alpha$ -Phenylmethan. Sm. 143° (J. pr. [2] 67, 463 C. 1903 [1] 1422).  
 $C_{21}H_{18}N_8JS$  1) Methyläther d. 5-Jod-3-Merkapto-1,4,5-Triphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 330° (J. pr. [2] 67, 229 C. 1903 [1] 1262).  
 $C_{21}H_{19}ONS$  1) 4-[2-Oxybenzyliden]amido-3,4'-Dimethyldiphenylsulfid. HCl (J. pr. [2] 68, 288 C. 1903 [2] 995).  
 2) Methyläther d. 4'-[4-Oxybenzyliden]amido-4-Methyldiphenylsulfid. Sm. 119° (J. pr. [2] 68, 272 C. 1903 [2] 993).  
 3) 4-Benzoylamido-3,4'-Dimethyldiphenylsulfid. Sm. 133° (J. pr. [2] 68, 282 C. 1903 [2] 994).  
 $C_{21}H_{19}ON_8S$  1) 3-Methyläther d. 3-Merkapto-5-Oxy-1,4,5-Triphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 157° (J. pr. [2] 67, 231 C. 1903 [1] 1262).  
 $C_{21}H_{19}O_2NS$  1) Sulfam d.  $\alpha$ -Oxytriphenylmethan-2-Sulfonsäureäthylamid. Sm. 155—156° (B. 37, 3262 C. 1904 [2] 1031).

- $C_{21}H_{19}O_2N_2Br$  1) 5-Aethyläther d. 3'-Brom-2-[2-Oxyphenylidenamido-5-Oxydiphenylamin. Sm. 116° (B. 36, 3870 C. 1904 [1] 332).
- $C_{21}H_{19}O_3NS$  1) 2-[4-Methylphenylsulfon]amido-4'-Methyldiphenylketon. Sm. 123° (B. 35, 4276 C. 1903 [1] 333).  
2) 2-[Methyl-4-Methylphenylsulfon]amidodiphenylketon. Sm. 124° (B. 35, 4276 C. 1903 [1] 332).
- $C_{21}H_{19}O_4NS$  1) Methyläther d. 2-[4-Methylphenylsulfon]amido-4'-Oxydiphenylketon. Sm. 143° (B. 35, 4276 C. 1903 [1] 332).
- $C_{21}H_{19}O_5NBr_2$  1) Acetat d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -[5-Diacetylamido-2-Oxyphenyl]- $\alpha$ -Phenylpropan. Sm. 170° (B. 37, 2827 C. 1904 [2] 704).
- $C_{21}H_{20}ON_2S$  2) 4-Methylphenyläther d.  $\alpha$ -Phenyl- $\beta$ -[4-Merkapto-2-Methylphenyl]harnstoff. Sm. 187° (J. pr. [2] 68, 286 C. 1903 [2] 995).  
3) 4-Methylphenyläther d.  $\alpha$ -Phenyl- $\beta$ -[4-Merkapto-3-Methylphenyl]harnstoff. Sm. 227° (J. pr. [2] 68, 292 C. 1903 [2] 995).
- $C_{21}H_{20}O_2N_2Br_2$  2) isom. Dibromstrychnin. Sm. 130—131° (HBr, Br) (Bl. [3] 31, 388 C. 1904 [1] 1280).
- $C_{21}H_{20}O_3NP$  1) Di[Phenylamid] d. 1,2,3,4-Tetrahydro-1-Chinolyolphosphinsäure. Sm. 176° (A. 326, 188 C. 1903 [1] 820).
- $C_{21}H_{20}O_6N_2S$  1)  $\alpha$ -[2-Naphtylsulfonamidoacetyl]amido- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 166—166,5° (B. 36, 2599 C. 1903 [2] 619).
- $C_{21}H_{21}O_2N_2Br$  3) isom. Bromstrychnin. Sm. 199° (HBr, Br) (Bl. [3] 31, 386 C. 1904 [1] 1279).
- $C_{21}H_{21}O_3N_2J$  1) Jodstrychnin. Sm. 188° (HJ, J) (Bl. [3] 31, 389 C. 1904 [1] 1280).
- $C_{21}H_{21}O_3N_2S$  1) Sultam d.  $\beta$ -Diamido- $\alpha$ -Oxytriphenylmethan-2-Sulfonsäureäthylamid. Sm. noch nicht bei 250° (B. 37, 3263 C. 1904 [2] 1031).
- $C_{21}H_{21}O_2N_3S_2$  1) Methyläther d.  $\alpha$ -[ $\beta$ -Phenylsulfon- $\alpha$ -Benzylhydrazido]- $\alpha$ -Phenylimido- $\alpha$ -Merkaptomethan. Sm. 126° (B. 37, 2329 C. 1904 [2] 313).
- $C_{21}H_{21}O_8NS$  1) Aethylamid d.  $\alpha$ -Oxytriphenylmethan-2-Sulfonsäure. Sm. 184 bis 185° (B. 37, 390 C. 1904 [1] 669; B. 37, 3262 C. 1904 [2] 1031).
- $C_{21}H_{21}N_6S_3P$  \*1) Phosphortri[Phenylthioharnstoff]. Sm. 67—69° (Soc. 85, 355 C. 1904 [1] 1406).
- $C_{21}H_{22}O_3N_2J_2$  1) Dijoddihydrostrychnin (Bl. [3] 31, 390 C. 1904 [1] 1280).
- $C_{21}H_{22}O_8Br_2S$  1)  $\alpha\beta$ -Dibrom- $\epsilon$ -[4-Methylphenyl]sulfon- $\gamma$ -Keto- $\alpha\epsilon$ -Diphenylpentan. Sm. 204° u. Zers. — \*III, 175.
- $C_{21}H_{22}O_4NBr$  1) Tetramethyläther d. 6,7-Dioxy-2-Methyl-1-[6-Brom-3,4-Dioxybenzyliden]-1,2-Dihydroisochinolin (N-Methylbromisopapaverin). Sm. 122° (B. 37, 3813 C. 1904 [2] 1575).
- $C_{21}H_{22}O_4N_3J$  1) Jodmethylat d. Diazopapaverin +  $H_2O$ . Sm. 198° u. Zers. (wasserfrei) (B. 37, 1935 C. 1904 [2] 129).
- $C_{21}H_{22}O_5NJ$  \*1) Jodmethylat d. Papaveraldin +  $2H_2O$  (M. 24, 716 C. 1904 [1] 218).
- $C_{21}H_{22}O_6N_2Cl$  1) Chlormethylat d. 6,7-Dioxy-1-[6-Nitro-3,4-Dioxybenzyl]isochinolintetramethyläther (Ch. d. Nitropapaverin). Sm. 212° (B. 37, 1932 C. 1904 [2] 129).
- $C_{21}H_{22}O_6N_2Br$  1) Brommethylat d. 6,7-Dioxy-1-[6-Nitro-3,4-Dioxybenzyl]isochinolintetramethyläther (Br. d. Nitropapaverin). Sm. 227° u. Zers. (B. 37, 1931 C. 1904 [2] 128).
- $C_{21}H_{22}O_6N_2J$  1) Jodmethylat d. 6,7-Dioxy-1-[6-Nitro-3,4-Dioxybenzyl]isochinolintetramethyläther (J. d. Nitropapaverin). Sm. 225° (B. 37, 1931 C. 1904 [2] 128).
- $C_{21}H_{24}ON_3P$  \*1) Tri[2-Methylphenylamid] d. Phosphorsäure. Sm. 236° (A. 326, 250 Anm. C. 1903 [1] 868).  
4) Tri[Methylphenylamid] d. Phosphorsäure. Sm. 162° (A. 326, 256 C. 1903 [1] 869).  
5) Tri[Benzylamid] d. Phosphorsäure. Sm. 98° (A. 326, 178 C. 1903 [1] 819).  
6) Methylphenylamid-Di[4-Methylphenylamid] d. Phosphorsäure. Sm. 232° (A. 326, 255 C. 1903 [1] 869).
- $C_{21}H_{24}O_5NBr$  1) Brombenzoylmethylat d. 1,2,3,4-Tetrahydro-2-Isochinolyl-essigsäureäthylester. Zers. 89—90° (B. 36, 1160 C. 1903 [1] 1186).
- $C_{21}H_{24}O_3NJ$  2) Monoacetat d. Methylapomorphinjodmethylat. Sm. 241—242° u. Zers. (B. 35, 4389 C. 1903 [1] 339).
- $C_{21}H_{24}O_3N_2Br_2$  1) Acetat d. 3,6-Dibrom-6'-Dimethylamido-3'-Acetylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 138—139° (A. 334, 315 C. 1904 [2] 987).

- $C_{21}H_{24}O_7N_2S$  1) Sulfanilsäureazodesmotroposantonin. Sm. 269° (B. 36, 1392 C. 1903 [1] 1360).
- $C_{21}H_{24}N_3SP$  3) Tri[Benzylamid] d. Thiophosphorsäure. Sm. 127° (A. 326, 209 C. 1903 [1] 822).
- $C_{21}H_{25}O_2NBr_2$  1) Acetat d. 3,6-Dibrom-4'-Diäthylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 139—140° (A. 334, 317 C. 1904 [2] 987).
- $C_{21}H_{25}O_2N_2Br$  1) 4-Aethoxylbromphenylat d. 2-[4-Aethoxylphenyl]amido-1,2-Dihydropyridin. Sm. 143° (J. pr. [2] 69, 130 C. 1904 [1] 815).
- $C_{21}H_{25}O_4N_2Cl$  1) Chlormethylat d. 6,7-Dioxy-1-[6-Amido-3,4-Dioxybenzyl]isochinolin. Sm. 147°. HCl (B. 37, 1940 C. 1904 [2] 130).
- $C_{21}H_{25}O_4N_2Br$  1) Bromderivat d. Propan- $\alpha\beta$ -Dicarbonsäuredi[4-Aethoxylphenylamid]. Sm. 74° (G. 34 [2] 271 C. 1904 [2] 1454).
- $C_{21}H_{28}O_3NJ$  1) Jodmethylat d. Dimethylapomorphimethin. Sm. 242—244° (B. 35, 4390 C. 1903 [1] 339).
- $C_{21}H_{28}O_2N_3J$  1) Jodmethylat d. Isonitrosomethyleinchotoxin. Sm. 235° (B. 33, 3225). — \*III, 637.
- $C_{21}H_{29}O_3N_2Br$  1) Menthylester d.  $\alpha$ -Brom- $\alpha$ -[4-Methylphenyl]azoacetessigsäure. Sm. 155—156° (Soc. 83, 1128 C. 1903 [2] 24, 791).
- $C_{21}H_{30}O_7NJ$  1) Jodmethylat d. Anhydromethylcotarninmalonsäurediäthylester. Sm. 201° (B. 37, 2741 C. 1904 [2] 544).
- $C_{21}H_{31}O_4N_2Br$  1)  $\alpha$ -[ $\alpha$ -Bromisocapronyl]amidoisocapronylamido- $\beta$ -Phenylpropionsäure. Sm. 163—165° (B. 37, 3311 C. 1904 [2] 1306).

## — 21 V —

- $C_{21}H_{15}O_5N_2BrS$  1) 2-Brom-1-Amido-4-[4-Methylphenyl]amido-9,10-Anthrachinon-4<sup>3</sup>[oder 4<sup>3</sup>]-Sulfonsäure (Alizarinreinblau) (C. 1904 [2] 340).
- $C_{21}H_{21}ON_6S_3P$  \*1) Phosphoryltri[Phenylthioharnstoff] (Soc. 85, 365 C. 1904 [1] 1407).
- $C_{21}H_{21}O_3NBrP$  1) 2-Brom-4-Methylphenylmonamid d. Phosphorsäuredi[4-Methylphenylester]. Sm. 154° (A. 326, 239 C. 1903 [1] 868).
- $C_{21}H_{23}O_4NBrJ$  1) Jodmethylat d. 6,7-Dioxy-1-[6-Brom-3,4-Dioxybenzyl]isochinolintetramethyläther. Zers. bei 225° (B. 37, 3813 C. 1904 [2] 1575).

**C<sub>22</sub>-Gruppe.**

- $C_{22}H_{22}$  \*4) Tri[4-Methylphenyl]methan. Sm. 53—54°; Sd. oberh. 400° (B. 37, 3155 C. 1904 [2] 1048).
- $C_{22}H_{42}$  C 86,3 — H 13,7 — M. G. 306.
- 1) Kohlenwasserstoff (aus Petroleum) (C. 1904 [1] 409).

## — 22 II —

- $C_{22}H_{12}N_4$  2) Chinoxalophenanthrazin. Sm. 200°. HCl (B. 36, 4042 C. 1904 [1] 183; B. 36, 4053 C. 1904 [1] 185).
- 3) Naphtochinoxalonaftazin. Zers. bei 300° (B. 36, 4046 C. 1904 [1] 184; B. 36, 4053 C. 1904 [1] 185).
- $C_{22}H_{14}O_5$  3) 4-Benzoat d. 3,4-Dioxy-9,10-Phenanthrenchinon-3-Methyläther. Sm. 228° (B. 31, 3201). — \*III, 318.
- $C_{22}H_{14}O_6$  \*4) Diacetat d. 6,11-Dioxy-5,12-Naphtacenchinon. Sm. 235° (B. 36, 722 C. 1903 [1] 774).
- $C_{22}H_{14}O_9$  2) Triacetat d. Oxystyrogallol. Sm. 250° (i. V.) (C. 1899 [2] 967). — \*II, 1207.
- 3) Triacetat d. Trioxybrasanchinon. Sm. 281° (B. 36, 2200 C. 1903 [2] 381).
- $C_{22}H_{14}N_4$  3) 2,3-Diphenyl-1,4,5,10-Naphttetrazin (Diphenylpyrazinophenazin). Sm. 235° (B. 36, 4040 C. 1904 [1] 182).
- 4) Dihydrochinoxalophenanthrazin. Sm. oberh. 300° (B. 36, 4043 C. 1904 [1] 183).
- 5) Naphtobenzofluorindin. 2HCl (B. 37, 3890 C. 1904 [2] 1654).
- 6) Dinaphtofluoavin. Zers. bei 300° (B. 36, 4045 C. 1904 [1] 183).

- $C_{22}H_{15}N_3$  8) Nitril d.  $\alpha$ -[1-Naphtyl]imido- $\alpha$ -[1-Naphtyl]amidoessigsäure. Sm. 150° (165°) (D.R.P. 152019 *C.* 1904 [2] 71; D.R.P. 153418 *C.* 1904 [2] 679).
- 9) Nitril d.  $\alpha$ -[2-Naphtyl]imido- $\alpha$ -[2-Naphtyl]amidoessigsäure. Sm. 166° (D.R.P. 152019 *C.* 1904 [2] 71).
- $C_{22}H_{15}O_3$  14) Anhydrid d.  $\alpha\theta$ -Diphenyl- $\alpha\gamma\epsilon\eta$ -Oktatetraen- $\delta\epsilon$ -Dicarbonsäure. Sm. 215° u. Zers. (*A.* 331, 167 *C.* 1904 [1] 1211).
- 15) Methylester d. 2-Benzoylfluoren-2<sup>2</sup>-Carbonsäure. Sm. 126—128° (*B.* 36, 4037 *C.* 1904 [1] 168).
- 16) Pseudomethylester d. 2-Benzoylfluoren-2<sup>2</sup>-Carbonsäure. Sm. 200 bis 202° (*B.* 36, 4038 *C.* 1904 [1] 168).
- 17) Benzoat d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen. Sm. 108—109° (*B.* 36, 3679 *C.* 1903 [2] 1443).
- $C_{22}H_{16}O_4$  10) Diacetat d. 1,2-Dioxychrysen. Sm. 225—228° (D.R.P. 151981 *C.* 1904 [2] 167).
- $C_{22}H_{16}O_5$  13) Dimethyläther d. Hydrochinonphtalein. Sm. 200° (*B.* 36, 2959 *C.* 1903 [2] 1006).
- $C_{22}H_{16}O_6$  C 70,2 — H 4,2 — O 25,5 — M. G. 376.
- 1) 2,5-Dibenzoxybenzol-1-Carbonsäure. Sm. 179—180° (*Journ. of Physiology* 27, 92). — \*II, 1031.
- $C_{22}H_{16}O_7$  6) Dimethyläther d. Phloroglucinphtalein (*B.* 36, 1074 *C.* 1903 [1] 1181).
- $C_{22}H_{16}O_{10}$  7) Tetraacetat d. 1,6,8,9-Tetraoxy-9,10-Anthrachinon. Sm. 195° (*B.* 36, 2938 *C.* 1903 [2] 886).
- 8) Tetraacetat d. isom. 1,6,8,9-Tetraoxy-9,10-Anthrachinon. Sm. 238—240° (*B.* 36, 2941 *C.* 1903 [2] 886).
- $C_{22}H_{16}N_2$  10) Di[1-Naphtyliden]hydrazin. Sm. 152° (*Bl.* [3] 17, 303). — \*III, 48.
- $C_{22}H_{16}N_4$  \*2) 3,6-Di[2-Naphtyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 246° (*B.* 35, 3933 *C.* 1903 [1] 38).
- 3) Verbindung (aus 4,5-Diketo-1,3-Diphenyl-4,5-Dihydropyrazol) (*B.* 36, 1136 *C.* 1903 [1] 1254).
- $C_{22}H_{17}N_5$  5) Chinolylformazyl. Sm. 185° u. Zers. (*B.* 37, 3014 *C.* 1904 [2] 1409).
- 6) Verbindung (aus d. Verb.  $C_{22}H_{22}N_6$ ). 2HCl (*B.* 37, 3891 *C.* 1904 [2] 1654).
- $C_{22}H_{18}O$  \*4) Verbindung (aus  $\alpha$ -Chlor- $\gamma$ -Keto- $\alpha\beta\delta$ -Triphenylbutan). Sm. 162° (*M.* 24, 725 *C.* 1904 [1] 167).
- 5)  $\gamma$ -Keto- $\beta\gamma$ -Diphenyl- $\alpha$ -[4-Methylphenyl]propen. Sm. 95° (*B.* 35, 3966 *C.* 1903 [1] 30).
- 6) isom.  $\gamma$ -Keto- $\beta\gamma$ -Diphenyl- $\alpha$ -[4-Methylphenyl]propen. Sm. 78° (*B.* 35, 3966 *C.* 1903 [1] 30).
- $C_{22}H_{18}O_2$  16) Methyläther d.  $\gamma$ -Keto- $\beta\gamma$ -Diphenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 113° (*B.* 35, 3971 *C.* 1903 [1] 31).
- 17) Methyläther d. isom.  $\gamma$ -Keto- $\beta\gamma$ -Diphenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 85° (*B.* 35, 3972 *C.* 1903 [1] 31).
- 18) Lakton d. 6-Oxy-3,4-Dimethyltriphenylessigsäure. Sm. 178° (*B.* 37, 665 *C.* 1904 [1] 952).
- 19) Lakton d. 2-Oxy-3,5-Dimethyltriphenylessigsäure. Sm. 170° (*B.* 37, 666 *C.* 1904 [1] 952).
- $C_{22}H_{18}O_3$  8) Äthylester d. 3-Benzoylacenaphten-3<sup>2</sup>-Carbonsäure. Sm. 111°. Pikrat (*A.* 327, 101 *C.* 1903 [1] 1228).
- 9) Verbindung (aus Cinnamethylakrylsäure). Sm. 152° (*B.* 36, 4324 Anm. *C.* 1904 [1] 453).
- $C_{22}H_{18}O_4$  \*5) Dibenzylester d. Benzol-1,2-Dicarbonsäure. Sm. 43°; Sd. 275—278°<sub>12</sub> (*B.* 35, 4092 *C.* 1903 [1] 75; *B.* 36, 160 *C.* 1903 [1] 502).
- 12)  $\alpha\theta$ -Diphenyl- $\alpha\gamma\epsilon\eta$ -Oktatetraen- $\delta\epsilon$ -Dicarbonsäure. Ca + 4H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Ag<sub>2</sub> (*A.* 331, 168 *C.* 1904 [1] 1211).
- 13) Dibenzoat d. 3,5-Dioxy-1,2-Dimethylbenzol. Sm. 100—102° (*A.* 329, 306 *C.* 1904 [1] 793).
- $C_{22}H_{18}O_6$  9) Äthylester d. Hydrochinonphtalincarbonsäure. Sm. 188—189° (*B.* 36, 2958 *C.* 1903 [2] 1006).
- $C_{22}H_{18}O_6$  12) Verbindung (aus Ononetin). Sm. 190° (*M.* 24, 140 *C.* 1903 [1] 1033).
- $C_{22}H_{18}O_7$  \*3) Triacetat d. 7-Oxy-4-Methylen-2-[2,4-Dioxyphenyl]-1,4-Benzopyran (Tr. d. Resacetin). Sm. 239—240° (*B.* 36, 734 *C.* 1903 [1] 840; *B.* 37, 364 *C.* 1904 [1] 671).
- \*4) Triacetat d. Verb.  $C_{16}H_{12}O_4$ . Sm. 190—194° u. Zers. (*M.* 25, 885 *C.* 1904 [2] 1313).

- $C_{22}H_{18}O_9$   
 $C_{22}H_{19}N$  4) Cocaflavetin +  $3H_2O$ . Sm.  $230^\circ$  (*J. pr.* [2] 66, 415 *C.* 1903 [1] 528).  
5)  $\alpha$ -Phenylimido- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten. Sm.  $229^\circ$  (*M.* 25, 424 *C.* 1904 [2] 336).
- $C_{22}H_{19}N_3$  6) 3,5-Diphenyl-1-[2,4-Dimethylphenyl]-1,2,4-Triazol. Sm.  $85^\circ$  (*J. pr.* [2] 67, 490 *C.* 1903 [2] 250).  
4) 6-Dimethylamido-2,3-Diphenyl-1,4-Benzdiazin. Sm. 193—194° (*B.* 37, 2616 *C.* 1904 [2] 517).
- $C_{22}H_{20}O$  2)  $\alpha$ -Keto- $\alpha\gamma\gamma$ -Triphenylbutan. Sm.  $103^\circ$  (*Am.* 31, 658 *C.* 1904 [2] 447).  
3)  $\gamma$ -Keto- $\alpha\alpha\gamma$ -Triphenyl- $\beta$ -Methylpropan. Sm.  $105^\circ$  (*Am.* 31, 657 *C.* 1904 [2] 446).
- $C_{22}H_{20}O_2$  11) Acetat d. 4-Oxy-3-Methyltriphenylmethan. Sm. 63—64° (*B.* 36, 3561 *C.* 1903 [2] 1374).  
 $C_{22}H_{20}O_3$  5) 4-Acetat d.  $\alpha$ ,4-Dioxy-3-Methyltriphenylmethan. Sm. 127—128° (*B.* 36, 3559 *C.* 1903 [2] 1374).  
6) 4-Oxy-2,5-Dimethyltriphenyllessigsäure. Zers. bei 236—237° (*B.* 37, 666 *C.* 1904 [1] 952).  
7) Anhydrid d.  $\alpha\beta$ -Diphenyl- $\beta\zeta$ -Oktadien- $\delta\epsilon$ -Dicarbonsäure. Sm. 164° (*A.* 331, 171 *C.* 1904 [1] 1212).
- $C_{22}H_{20}O_4$  10) Diphenoxymethylenäther d. 3,4-Dioxy-1-Propylbenzol. Sd. 256 bis  $258^\circ_{17}$  (*C. r.* 138, 424 *C.* 1904 [1] 798).  
11) 3,3'-Dioxytriphenyllessigdimethyläthersäure. Sm.  $246^\circ$  (*B.* 37, 4037 *C.* 1904 [2] 1600).
- $C_{22}H_{20}O_7$  \*3) Acetat d.  $\beta$ -Dehydrohämatoxylintetramethyläther (A. d. Pentaoxyrufidentetramethyläther). Sm. 193—196° (*B.* 36, 2203 *C.* 1903 [2] 382; *B.* 37, 633 *C.* 1904 [1] 955).  
6) Aethylester d. 4,7-Diacetoxyl-2-Phenyl-1,4-Benzpyran-4-Carbonsäure. Fl. (*B.* 36, 1952 *C.* 1903 [2] 296).  
7) Acetat d.  $\alpha$ -Dehydrohämatoxylintetramethyläther. Sm. 165—171° (*B.* 37, 633 *C.* 1904 [1] 955).  
8)  $\alpha$ -Acetat d. Pentaoxybrasantetramethyläther. Sm.  $194^\circ$  (*B.* 36, 3714 *C.* 1904 [1] 39).  
9)  $\beta$ -Acetat d. Pentaoxybrasantetramethyläther. Sm.  $196^\circ$  (*B.* 36, 2204 *C.* 1903 [2] 382; *B.* 36, 3714 *C.* 1904 [1] 39).
- $C_{22}H_{20}O_{10}$  4) Diacetat d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinontetramethyläther. Sm.  $262^\circ$  u. Zers. (*D.R.P.* 151724 *C.* 1904 [1] 1586; *C.* 1904 [2] 709).
- $C_{22}H_{20}N_2$  12)  $\gamma$ -Phenylhydrazon- $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropen. Sm.  $131^\circ$  (*Am.* 31, 656 *C.* 1904 [2] 446).
- $C_{22}H_{20}N_6$  3) Tri[Benzylidenamido]guanidin. Sm.  $196^\circ$ . HCl (*B.* 37, 3548 *C.* 1904 [2] 1379).
- $C_{22}H_{21}N$  C 88,3 — H 7,0 — N 4,7 — M. G. 299.  
1) 5-Methyl-2,4-Diphenyl-5,6,7,8-Tetrahydrochinolin. Sm. 112—113°.  
HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 35, 3980 *C.* 1903 [1] 37).
- $C_{22}H_{21}Cl$  \*1)  $\alpha$ -Chlortri[4-Methylphenyl]methan. Sm.  $173^\circ$  ( $181^\circ$ ). + AlCl<sub>3</sub> (*B.* 37, 1627 *C.* 1904 [1] 1648; *B.* 37, 3156 *C.* 1904 [2] 1048).
- $C_{22}H_{21}Br$  1)  $\alpha$ -Bromtri[4-Methylphenyl]methan. Sm. 161—163° (*B.* 37, 3156 *C.* 1904 [2] 1048).
- $C_{22}H_{21}J$  1)  $\alpha$ -Jodtri[4-Methylphenyl]methan. + J<sub>2</sub> (*B.* 37, 3157 *C.* 1904 [2] 1048).
- $C_{22}H_{22}O$  \*3)  $\alpha$ -Oxytri[4-Methylphenyl]methan. Sm. 123—124° ( $94^\circ$ ;  $96,5^\circ$ ).  
+ C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> (Sm.  $87^\circ$ ) (*B.* 36, 1589 *C.* 1903 [2] 111; *B.* 37, 1630 *C.* 1904 [1] 1648; *B.* 37, 3153 *C.* 1904 [2] 1047).  
4)  $\alpha$ -Oxytribenzylmethan. Sm. 108—111° ( $114^\circ$ ) (*B.* 36, 1589 *C.* 1903 [2] 111; *B.* 36, 3089 *C.* 1903 [2] 1004; *B.* 36, 3237 *C.* 1903 [2] 950; *B.* 37, 1456 *C.* 1904 [1] 1353).  
5) Aethyläther d. 4-Oxy-3-Methyltriphenylmethan. Sm.  $75^\circ$  (*B.* 36, 3562 *C.* 1903 [2] 1374).  
C 83,0 — H 6,9 — O 10,1 — M. G. 318.
- $C_{22}H_{22}O_2$  1) Dimethyläther d.  $\alpha$ ,4-Dioxy-3-Methyltriphenylmethan. Sm. 91—92° (*B.* 36, 3560 *C.* 1903 [2] 1374).  
2)  $\alpha$ -Aethyläther d.  $\alpha$ ,4-Dioxy-3-Methyltriphenylmethan. Sm. 150 bis  $151^\circ$  (*B.* 36, 3565 *C.* 1903 [2] 1375).
- $C_{22}H_{22}O_4$  7)  $\alpha\beta$ -Diphenyl- $\beta\zeta$ -Oktadien- $\delta\epsilon$ -Dicarbonsäure. Sm.  $182^\circ$ . Ba, Ag<sub>2</sub> (*A.* 331, 170 *C.* 1904 [1] 1211).

- $C_{22}H_{22}O_4$  8) Diäthylester d.  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm. 110,5° (B. 37, 2244 C. 1904 [2] 328).
- $C_{22}H_{22}O_5$  9) Diacetat d. o-Dioxyreten. Sm. 171° (D.R.P. 151981 C. 1904 [2] 167).
- $C_{22}H_{22}O_5$  5) 7-Acetat d. 7-Oxy-4-Methylen-2-[2,4-Dioxyphenyl]-1,4-Benzpyran-2',2'-Diäthyläther. Sm. 223—242° (B. 37, 361 C. 1904 [1] 671).
- $C_{22}H_{22}O_7$  2) Verbindung (aus 4-Nitroso-1-Dimethylamidobenzol u. Benzoylessigsäureäthylester). Sm. 91,5° (B. 36, 3235 C. 1903 [2] 941).
- $C_{22}H_{22}O_8$  14) Tetraacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 172—173° (A. 335, 190 C. 1904 [2] 1131).
- $C_{22}H_{22}O_8$  15) Tetraacetat d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 124 bis 125° (A. 335, 190 C. 1904 [2] 1131).
- $C_{22}H_{22}N_2$  10)  $\alpha$ -Phenylhydrazon- $\alpha\gamma$ -Diphenylbutan. Sm. 78—79° (A. 330, 233 C. 1904 [1] 945).
- $C_{22}H_{22}N_2$  11)  $\alpha$ -[4-Aethylbenzyliden]- $\beta$ -Phenyl- $\beta$ -Benzylhydrazin. Sm. 104° (C. r. 137, 717 C. 1903 [2] 1433).
- $C_{22}H_{22}N_6$  4) 2,4,2'-Triamido-5-[1-Amido-2-Naphtyl]amidodiphenylamin. 4HCl (B. 37, 3891 C. 1904 [2] 1654).
- $C_{22}H_{23}N$  3)  $\alpha$ -Amidotri[4-Methylphenyl]methan. Sm. 97° (B. 37, 3158 C. 1904 [2] 1048).
- $C_{22}H_{24}O_4$  13) Diacetat d.  $\alpha\beta$ -Di[4-Oxy-2,5-Dimethylphenyl]äthen. Sm. 185 bis 186° (B. 36, 1893 C. 1903 [2] 292).
- $C_{22}H_{24}O_5$  C 71,7 — H 6,5 — O 21,7 — M. G. 368.
- $C_{22}H_{24}O_5$  1) 7-Acetat d. 7-Oxy-4-Methyl-2-[2,4-Dioxyphenyl]-1,4-Benzpyran-2',2'-Diäthyläther. Sm. 118° (B. 37, 362 C. 1904 [1] 671).
- $C_{22}H_{24}O_6$  7) bim. o-Cumaräthyläthersäure. Sm. 273—274° (B. 37, 1385 C. 1904 [1] 1344).
- $C_{22}H_{24}O_{12}$  C 55,0 — H 5,0 — O 40,0 — M. G. 480.
- $C_{22}H_{24}N_2$  1) Carminsäure. K (Soc. 83, 139 C. 1903 [1] 90, 466).
- $C_{22}H_{24}N_2$  8) Verbindung (aus 2-Methylindol u. Isobuttersäurealdehyd). Sm. 207° (B. 36, 4327 C. 1904 [1] 462).
- $C_{22}H_{24}N_4$  3)  $\beta$ -[6-Phenylazo-4-Phenylhydrazon-5-Methyl-1,2,3,4-Tetrahydrophenyl-2-]propen. Sm. 147° (A. 330, 270 C. 1904 [1] 948).
- $C_{22}H_{24}N_4$  4) Verbindung (aus C-Acetyldimethylhydroresorcin). Sm. 190° (B. 37, 3381 C. 1904 [2] 1219).
- $C_{22}H_{26}O_4$  10) Dimethyläther d.  $\beta\eta$ -Diketo- $\delta\delta$ -Di[4-Oxyphenyl]oktan. Sm. 151 bis 152° (A. 330, 236 C. 1904 [1] 945).
- $C_{22}H_{26}O_7$  \*2) Limonin. Sm. 275° (Ar. 240, 661 C. 1903 [1] 406).
- $C_{22}H_{26}O_8$  \*3) Divaricatsäure (A. 336, 55 C. 1904 [2] 1325).
- $C_{22}H_{26}O_8$  C 63,2 — H 6,2 — O 30,6 — M. G. 418.
- $C_{22}H_{26}O_8$  1) Dibenzylidenverbindung d. Oktit (aus Rosaceen). Sm. 230° (C. r. 127, 761). — \*III, 6.
- $C_{22}H_{28}O_8$  4) Diacetoxyl- $\alpha$ -Dicamphylsäure. Sm. 174—175° (Soc. 83, 865 C. 1903 [2] 573).
- $C_{22}H_{30}O_2$  4) Benzoat d. Gurjuresinol. Sm. 106—107° (Ar. 241, 389 C. 1903 [2] 724).
- $C_{22}H_{34}O_2$  5) Acetat d. Verbindung  $C_{20}H_{32}O$ . Sm. 72—73° (C. 1904 [1] 1265).
- $C_{22}H_{34}O_8$  5)  $\alpha$ -Oxy- $\alpha\alpha$ -Dicamphoryläthan (Methyldicamphorylcarbinol). Sm. 148 bis 149° (B. 36, 2635 C. 1903 [2] 626).
- $C_{22}H_{36}O$  \*2) Pentadekylphenylketon (C. 1904 [1] 1259).
- $C_{22}H_{36}O_2$  \*5) Pentadekyl-4-Oxyphenylketon. Sm. 78° (B. 36, 3891 C. 1904 [1] 93).
- $C_{22}H_{36}O_2$  7) Propionat d. Spongosterin. Sm. 135—136° (H. 41, 115 C. 1904 [1] 996).
- $C_{22}H_{38}O_{10}$  C 57,4 — H 7,8 — O 34,8 — M. G. 460.
- $C_{22}H_{38}O_{10}$  1) Verbindung (aus Essigsäure u. Camphersäure) (R. 21, 353 C. 1903 [1] 150).
- $C_{22}H_{38}O_{18}$  C 44,9 — H 6,1 — O 49,0 — M. G. 588.
- $C_{22}H_{38}O_4$  1) Leinsamenschleim (B. 36, 3198 C. 1903 [2] 1054).
- $C_{22}H_{38}O_4$  \*2) Dimenthylester d. Oxalsäure. Sm. 68° (C. 1903 [1] 162; B. 37, 1378 C. 1904 [1] 1441).
- $C_{22}H_{40}O_2$  \*1) Behenolsäure. Sm. 57,5° (G. 34 [2] 53 C. 1904 [2] 693).
- $C_{22}H_{40}O_2$  3) Isobornylester d. Laurinsäure. Sd. 202° (C. r. 136, 239 C. 1903 [1] 584).
- $C_{22}H_{40}O_3$  C 75,0 — H 11,4 — O 13,6 — M. G. 352.
- $C_{22}H_{40}O_3$  1) Isobutylester d. Ricinolsäure. Sd. 262° (B. 36, 785 C. 1903 [1] 824).

- $C_{22}H_{40}O_4$  3) Methylester d. Propionylricinolsäure. *Sd.* 260°<sub>18</sub> (*B.* 36, 787 *C.* 1903 [1] 824).  
 4) Aethylester d. Acetylricinolsäure. *Sd.* 255–260°<sub>18</sub> (*B.* 36, 786 *C.* 1903 [1] 824).
- $C_{22}H_{42}O$  \*1)  $\mu$ -Keto- $\kappa$ -Methyl- $\kappa$ -Heneikosen. *Sd.* 214–216°<sub>10</sub> (*B.* 36, 2556 *C.* 1903 [2] 655).
- $C_{22}H_{42}O_2$  \*3) Isoerukasäure. *Sm.* 54–56° (*G.* 34 [2] 50 *C.* 1904 [2] 693).  
 $C_{22}H_{42}O_3$  \*3) Phellonsäure. *Sm.* 96° (*M.* 25, 279 *C.* 1904 [1] 1572).  
 6) Isophellonsäure. *Sm.* 73° (*M.* 25, 293 *C.* 1904 [1] 1573).  
 7) Glycidsäure (aus Chloroxybehensäure). *Sm.* 64° (*B.* 36, 3605 *C.* 1903 [2] 1314).  
 8) Glycidsäure (aus ?-Brom-?-Acetoxylbehensäure). *Sm.* 69–71° (*C.* 1903 [1] 319).  
 9) Glycidsäure (aus d. isom. Chloroxybehensäure). *Sm.* 71° (*B.* 36, 3605 *C.* 1903 [2] 1314).
- 10) Butylester d. Ricinolsäure. *Sd.* 275°<sub>18</sub> (*B.* 36, 784 *C.* 1903 [1] 824).
- $C_{22}H_{44}O_4$  \*1) Dioxybehensäure. *Sm.* 99° (*J. pr.* [2] 67, 297 *C.* 1903 [1] 1404; *J. pr.* [2] 67, 364 *C.* 1903 [1] 1404; *B.* 36, 3605 *C.* 1903 [2] 1314).  
 \*2) isom. Dioxybehensäure (aus Brassidinsäure). *Sm.* 130–132° (132 bis 133°) (*C.* 1903 [1] 319; *J. pr.* [2] 67, 299 *C.* 1903 [1] 1404; *J. pr.* [2] 67, 365 *C.* 1903 [1] 1404; *B.* 36, 3605 *C.* 1903 [2] 1314).
- $C_{22}H_{44}N_2$  *C* 83,6 — *H* 7,6 — *N* 8,8 — *M. G.* 316.  
 1) Di[Undekyliden]hydrazin. *Sm.* 57° (*Bl.* [3] 29, 1206 *C.* 1904 [1] 355).
- $C_{22}H_{46}O$  \*1) Aether d.  $\beta$ -Oxyundekan. *Sd.* 198–200°<sub>10</sub> (*B.* 36, 2549 *C.* 1903 [2] 654).  
 2) Aether d.  $\alpha$ -Oxyundekan (*Bl.* [3] 29, 1207 *C.* 1904 [1] 355).  
*C* 67,7 — *H* 11,8 — *O* 20,5 — *M. G.* 390.
- $C_{22}H_{46}O_6$  1) Leiphämsäure. *Sm.* 114–115° (*A.* 327, 351 *C.* 1903 [2] 510).

## — 22 III —

- $C_{22}H_{12}O_4N_2$  \*1) 1,3-Di[1,2-Phtalylamido]benzol. *Sm.* 320° (*A.* 327, 44 *C.* 1903 [1] 1336).  
 \*2) 1,4-Di[1,2-Phtalylamido]benzol. *Sm.* 356° (*A.* 327, 45 *C.* 1903 [1] 1336).  
 3) 1,2-Di[1,2-Phtalylamido]benzol (1,2-Phenylendiphtalimid). *Sm.* 292° (*A.* 327, 42 *C.* 1903 [1] 1336).
- $C_{22}H_{12}O_6Br_4$  5) Tetrabrom- $\alpha$ -Orcinphthalein (*B.* 29, 2632). — \*II, 1212.  
 $C_{22}H_{12}O_7Cl_4$  1) Dimethyläther d. Tetrachlordioxyfluorescein. *Sm.* 275° (*B.* 36, 1078 *C.* 1903 [1] 1182).
- $C_{22}H_{13}O_2N$  3) Chinonaphtalon (Phtalon aus Chinaldin u. Naphtalsäureanhydrid). *Sm.* 256° (*B.* 37, 3611 *C.* 1904 [2] 1520).
- $C_{22}H_{14}ON_2$  6) 3-Keto-2-[1-Naphtyl]imido-2,3-Dihydro- $\alpha$ -Naphtindol (D.R.P. 152019 *C.* 1904 [2] 72).  
 7) 1-Keto-2-[2-Naphtyl]imido-1,2-Dihydro- $\beta$ -Naphtindol. *Sm.* oberh. 180° (D.R.P. 152019 *C.* 1904 [2] 72).
- $C_{22}H_{14}O_2N_2$  11) Phenylamidonaphtophenoxazon. *Sm.* oberh. 360° (*B.* 36, 1809 *C.* 1903 [2] 206).
- $C_{22}H_{14}O_2N_4$  3) 3,8-Di-[Furylidenamido]-5,6-Naphtisodiazin. *Sm.* 207° (*C.* 1904 [1] 1614).
- $C_{22}H_{14}O_3N_2$  \*1) Rosindonsäure. *Sm.* 227–228° (*B.* 36, 3624 *C.* 1903 [2] 1383).  
 2) Isorosindonsäure. *Sm.* 206° u. Zers. (*B.* 36, 3623 *C.* 1903 [2] 1383).
- $C_{22}H_{14}O_3Cl_2$  1) Dichlordimethylfluoran (aus 2-Chlor-4-Oxy-1-Methylbenzol). *Sm.* 285° (D.R.P. 156333 *C.* 1904 [2] 1673).
- $C_{22}H_{14}O_3Br_2$  1) Dibromdimethylfluoran (aus 2-Brom-4-Oxy-1-Methylbenzol). *Sm.* 284 bis 285° (D.R.P. 156333 *C.* 1904 [2] 1673).
- $C_{22}H_{14}O_7Br_2$  1) Aethylester d. Dibromdioxyfluorescein (*B.* 36, 1082 *C.* 1903 [1] 1182).
- $C_{22}H_{14}O_8Br_2$  1) Dibromdioxyfluorescein (aus Hemipinsäure) (*B.* 36, 1074 *Ann. C.* 1903 [1] 1181).
- $C_{22}H_{15}ON_3$  13) 2-Naphtylhydrazon d. 2-Naphtylisatin. *Sm.* 270–272° (*B.* 36, 1739 *C.* 1903 [1] 119).

- $C_{22}H_{15}O_2Cl$  1) Verbindung (aus Piperonal u. Desoxybenzoïn). Sm. 203—204° (B. 35, 3972 C. 1903 [1] 32).
- $C_{22}H_{15}O_4N$  2) Dibenzoat d. 2,3-Dioxypseudoindol. Sm. 170° (B. 37, 947 C. 1904 [1] 1217).
- $C_{22}H_{15}O_5N_3$  C 65,8 — H 3,7 — O 19,9 — N 10,5 — M. G. 401.
- 1)  $\gamma$ -Keto- $\gamma$ -[4-(3-Nitrobenzyliden)amidophenyl]- $\alpha$ -[3-Nitrophenyl]-propen. Sm. 195° (B. 37, 394 C. 1904 [1] 657).
- 2)  $\gamma$ -Keto- $\gamma$ -[4-(4-Nitrobenzyliden)amidophenyl]- $\alpha$ -[4-Nitrophenyl]-propen. Sm. 191—193° (B. 37, 304 C. 1904 [1] 657).
- $C_{22}H_{15}O_8N$  \*1) Triacetat d. Gallorubin. Sm. 234° (B. 37, 829 C. 1904 [1] 1153).
- $C_{22}H_{16}O_4N_2$  7) Dimethylenäther d. 1-[3,4-Dioxybenzyl]-2-[3,4-Dioxyphenyl]benzimidazol. Sm. 115—116°. +  $C_6H_6O$  (B. 37, 1703 C. 1904 [1] 1497).
- $C_{22}H_{16}O_5N_2$  3) Anilidodihydrogallorubin. Sm. 257° (B. 37, 830 C. 1904 [1] 1153).
- $C_{22}H_{16}O_6N_4$  C 61,1 — H 3,7 — O 22,2 — N 13,0 — M. G. 432.
- 1)  $\beta$ -Dinitro-3-[4-Dimethylamidophenyl]- $\beta$ -Naphthochinolin-1-Carbonsäure. Sm. 260—263° (B. 37, 1743 C. 1904 [1] 1599).
- $C_{22}H_{16}O_{12}N_6$  C 47,5 — H 2,9 — O 34,5 — N 15,1 — M. G. 556.
- 1)  $\beta$ -Hexanitrotri[4-Methylphenyl]methan. Sm. 280° (B. 37, 3163 C. 1904 [2] 1049).
- $C_{22}H_{16}O_{13}N_6$  C 46,2 — H 2,8 — O 36,3 — N 14,7 — M. G. 572.
- 1)  $\beta$ -Hexanitro- $\alpha$ -Oxytri[4-Methylphenyl]methan. Sm. 253° (B. 37, 3162 C. 1904 [2] 1049).
- $C_{22}H_{17}ON$  10)  $\gamma$ -Keto- $\gamma$ -[4-Benzylidenamidophenyl]- $\alpha$ -Phenylpropen. Sm. 143 bis 144° (B. 37, 392 C. 1904 [1] 657).
- $C_{22}H_{17}O_2N$  14) 2-Oxy-1-[ $\alpha$ -Furalamidobenzyl]naphthalin. Sm. 115—116° (G. 33 [1] 31 C. 1903 [1] 926).
- $C_{22}H_{17}O_2N_3$  6) 2-[4-Dimethylamidophenylazo]-9,10-Anthrachinon. Sm. 264—266° (C. 1904 [1] 289).
- $C_{22}H_{17}O_2Br$  1) Lakton d.  $\beta$ -Brom-6-Oxy-3,4-Dimethyltriphenylessigsäure. Sm. 161° (B. 37, 666 C. 1904 [1] 952).
- $C_{22}H_{17}O_4N$  10) Aethylrhodol (D.R.P. 116415). — \*III, 578.
- 11) Dimethylrhodol. HCl (D.R.P. 108419). — \*III, 578.
- $C_{22}H_{17}O_5N$  5) Aethylester d. 2,4,9-Triketo-1-[4-Methylphenyl]-2,3,4,9-Tetrahydro- $\beta\beta$ -Naphthindol-3-Carbonsäure. Sm. 280° u. Zers. (E. Hoyer, Dissert., Berlin 1901).
- 6) Amid d. 2,5-Dibenzoxylbenzol-1-Carbonsäure. Sm. 204° (Journ. of Physiologie 27, 92). — \*II, 1031.
- $C_{22}H_{17}O_7N_5$  C 57,0 — H 3,7 — O 24,2 — N 15,1 — M. G. 463.
- 1)  $\alpha$ -Cyan- $\beta$ -[3-Nitrophenyl]akrylsäureamid +  $\alpha$ -Cyan- $\beta$ -[3-Nitrophenyl]akrylsäureäthylester. Sm. 186,5° (C. 1904 [1] 878).
- 2)  $\alpha$ -Cyan- $\beta$ -[4-Nitrophenyl]akrylsäureamid +  $\alpha$ -Cyan- $\beta$ -[4-Nitrophenyl]akrylsäureäthylester. Sm. 194—195° (C. 1904 [1] 878).
- $C_{22}H_{17}N_3S_2$  1) Benzyläther d. 6-Merkapto-4-Thiocarbonyl-1,2-Diphenyl-1,4-Dihydro-1,3,5-Triazin? Sm. 190—191° (Ann. 30, 178 C. 1903 [2] 872).
- $C_{22}H_{18}ON_2$  15) N-Aethyl- $\alpha$ -Phenylpyrophthalin. Sm. 194°. (2HCl, PtCl<sub>4</sub>) (B. 36, 3922 C. 1904 [1] 98).
- $C_{22}H_{18}O_2N_2$  12) 1-Methylamido-4-[4-Methylphenyl]amido-9,10-Anthrachinon (D.R.P. 139581 C. 1903 [1] 680).
- 13) 1-Methylamido-5-Benzylamido-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 751).
- 14) 1-Methylamido-5-[4-Methylphenyl]amido-9,10-Anthrachinon. Sm. 199° (D.R.P. 139581 C. 1903 [1] 680).
- 15) 1-Methylamido-8-[4-Methylphenyl]amido-9,10-Anthrachinon (D.R.P. 139581 C. 1903 [1] 680).
- 16) 3-[4-Dimethylamidophenyl]- $\beta$ -Naphthochinolin-1-Carbonsäure. Sm. 293—295° (B. 37, 1743 C. 1904 [1] 1599).
- $C_{22}H_{18}O_5N_3$  4) s-Dimethylrhodamin (D.R.P. 48731). — \*III, 575.
- $C_{22}H_{18}O_6N_2$  9) Di[Phenylimid] d. cis-Hexahydrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 98° (Soc. 83, 788 C. 1903 [2] 440).
- $C_{22}H_{18}O_4N_6$  C 61,4 — H 4,2 — O 14,9 — N 19,5 — M. G. 215.
- 1) 4,6-Dinitro-2'-Amido-3-[1-Amido-2-Naphtyl]amidodiphenylamin. Sm. 259° (B. 37, 3891 C. 1904 [2] 1654).
- $C_{22}H_{18}O_4Cl_3$  1) Diäthylester d. 1,3-Dichlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure. Sm. 178° (B. 37, 1904 [1] 588).

- $C_{22}H_{18}O_4S_2$  3) 1,4-Diacetat d. 2,5-Dimerkapto-1,4-Dioxybenzol-2,5-Diphenyl-äther. Sm. 168—168,5° (A. 336, 135 C. 1904 [2] 1298).
- 4) 1,4-Diacetat d. 2,6-Dimerkapto-1,4-Dioxybenzol-2,6-Diphenyl-äther. Sm. 112—114° (A. 336, 137 C. 1904 [2] 1299).
- $C_{22}H_{18}O_8Cl_4$  1) Tetraacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 173° (A. 325, 61 C. 1903 [1] 462).
- 2) Tetraacetat d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 180° (A. 325, 62 C. 1903 [1] 462).
- $C_{22}H_{18}O_8Br_4$  2) Tetraacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 231° (A. 325, 40 C. 1903 [1] 461).
- 3) Tetraacetat d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan? Sm. 191° (A. 325, 41 C. 1903 [1] 461).
- $C_{22}H_{18}N_8Cl$  1) 1-[2-Chlorphenyl]-3,5-Di[4-Methylphenyl]-1,2,4-Triazol. Sm. 159° (J. pr. [2] 67, 495 C. 1903 [2] 251).
- 2) 1-[3-Chlorphenyl]-3,5-Di[4-Methylphenyl]-1,2,4-Triazol. Sm. 121° (J. pr. [2] 67, 497 C. 1903 [2] 251).
- 3) 1-[4-Chlorphenyl]-3,5-Di[4-Methylphenyl]-1,2,4-Triazol. Sm. 155° (J. pr. [2] 67, 499 C. 1903 [2] 251).
- 4) Nitril d.  $\beta$ -Phenylhydrazon- $\gamma$ -Phenyl- $\alpha$ -[4-Chlorphenyl]butter-säure. Sm. 131° (J. pr. [2] 67, 391 C. 1903 [1] 1357).
- $C_{22}H_{18}N_3Br$  1) 1-[4-Bromphenyl]-3,5-Di[4-Methylphenyl]-1,2,4-Triazol. Sm. 168° (J. pr. [2] 67, 501 C. 1903 [2] 251).
- $C_{22}H_{19}OCl$  2)  $\gamma$ -Chlor- $\alpha$ -Keto- $\alpha\beta$ -Diphenyl- $\gamma$ -[4-Methylphenyl]propan. Sm. 156° (B. 35, 3966 C. 1903 [1] 30).
- $C_{22}H_{19}O_3N$  8) 4-Methyläther d.  $\gamma$ -Oximido- $\beta\gamma$ -Diphenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 155° (B. 35, 3971 C. 1903 [1] 31).
- 9) Phenylamidoformiat d. 6-Oxy-3-Methyl- $\alpha$ -Diphenyläthen. Sm. 101° (B. 36, 4002 C. 1904 [1] 174).
- $C_{22}H_{19}O_2N_3$  6) 2,8-Diamido-3,7-Dimethyl-5-Phenylakridin-5<sup>2</sup>-Carbonsäure (D.R.P. 141356 C. 1903 [1] 1284).
- $C_{22}H_{19}O_2N_5$  C 68,6 — H 4,9 — O 8,3 — N 18,2 — M. G. 385.
- 1)  $\gamma\delta$ -Di[Phenylhydrazon]- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten. Sm. 206—207° (C. 1904 [1] 28; A. 330, 253 C. 1904 [1] 946).
- $C_{22}H_{19}O_2Cl$  1) Methyläther d.  $\gamma$ -Chlor- $\alpha$ -Keto- $\alpha\beta$ -Diphenyl- $\gamma$ -[2-Chlorphenyl]propan. Sm. 144° (B. 35, 3971 C. 1903 [1] 31).
- $C_{22}H_{19}O_5N$  5) Methylhydroxyd d. 5-Phenylakridin-5<sup>2</sup>-Carbonsäuremethylester. Methylsulfat, Trichromat, Pikrat (B. 37, 1008 C. 1904 [1] 1276).
- 6) Benzoat d. N-Benzoyl- $\beta$ -Phenylamido- $\alpha$ -Oxyäthan. Sm. 91—92° (A. 332, 211 C. 1904 [2] 211; B. 37, 3942 C. 1904 [2] 1597).
- $C_{22}H_{19}O_3N_3$  3) Phenylmonamid d.  $\alpha\beta$ -Di[2-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (A. 332, 270 C. 1904 [2] 701).
- $C_{22}H_{19}O_3N_5$  C 65,8 — H 4,7 — O 12,0 — N 17,5 — M. G. 401.
- 1) 4'-Dimethylamido-4-[ $\alpha$ -Cyanbenzyliden]amido-3-Oxydiphenylamin. Sm. 213—214° (J. pr. [2] 69, 239 C. 1904 [1] 1269).
- $C_{22}H_{19}O_5Br$  2)  $\beta$ -Brom-4-Oxy-2,5-Dimethyltriphenylessigsäure. Sm. 232—235° (B. 37, 668 C. 1904 [1] 953).
- $C_{22}H_{19}O_4N$  11) Dimethyläther d. Phenolphthaleinoxim. Sm. 178° (B. 36, 2965 C. 1903 [2] 1007).
- 12) Dibenzoat d. 2-[ $\beta\beta'$ -Dioxyisopropyl]pyridin. Sm. 90—91° (B. 37, 741 C. 1904 [1] 1039).
- $C_{22}H_{19}O_4N_3$  4)  $\gamma$ -[4-Nitrophenyl]hydrazon- $\alpha\gamma$ -Diphenylbuttersäure. Sm. 188—189° (Soc. 85, 1363 C. 1904 [2] 1646).
- 5) Di[4-Methylphenylamid] d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 223—225° u. Zers. (C. 1903 [2] 431).
- $C_{22}H_{19}O_4Cl_5$  1) Diäthylester d. 1-Chlor-1,4-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure. Sm. 142° (B. 37, 221 C. 1904 [1] 588).
- $C_{22}H_{19}O_7N_3$  C 60,4 — H 4,3 — O 25,6 — N 9,6 — M. G. 437.
- 1)  $\beta$ -Trinitro- $\alpha$ -Oxytri[4-Methylphenyl]methan. Sm. 162° (B. 37, 3162 C. 1904 [2] 1049).
- $C_{22}H_{19}O_5N_5$  C 54,9 — H 3,9 — O 26,6 — N 14,6 — M. G. 481.
- 1) Äthylester d. 2,4,6-Trinitro-3,5-Di[Phenylamido]essigsäure. Sm. 201°. + 2C<sub>6</sub>H<sub>6</sub> (Am. 32, 176 C. 1904 [2] 951).
- $C_{22}H_{19}NS$  1) 4'-Cinnamylidenamido-4-Methyldiphenylsulfid. Sm. 118° (J. pr. [2] 68, 273 C. 1903 [2] 993).

- $C_{22}H_{19}N_3S$  2) 5-Phenyl-4-Benzyl-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 234° (*J. pr.* [2] 67, 261 *C.* 1903 [1] 1266).
- $C_{22}H_{20}OS_3$  1) Diäthyläther d. 3,5-Dimerkapto-4-Thiocarbonyl-1-Keto-2,6-Diphenyl-1,4-Dihydrobenzol. Sm. 141,5—142° (*B.* 37, 1606 *C.* 1904 [1] 1444).
- $C_{22}H_{20}O_2N_2$  27)  $\alpha$ -Benzoyl- $\alpha$ -Di[4-Methylphenyl]harnstoff. Sm. 152—153° (*B.* 37, 3118 *C.* 1904 [2] 1317).
- 28) isom.  $\alpha\beta$ -Diacetyl- $\alpha$ -Phenyl- $\beta$ -[4-Biphenyl]hydrazin. Sm. 176° (*C.* 1904 [1] 1491).
- 29) isom.  $\alpha\beta$ -Diacetyl- $\alpha$ -Phenyl- $\beta$ -[4-Biphenyl]hydrazin. Sm. 217° (*C.* 1904 [1] 1491).
- $C_{22}H_{20}O_3N_2$  11) Äthyläther d. 2,5-Di[Benzoylamido]-1-Oxybenzol. Sm. 213° (*B.* 36, 4098 *C.* 1904 [1] 270; *B.* 36, 4125 *C.* 1904 [1] 273).
- $C_{22}H_{20}O_3S$  3)  $\gamma$ -[4-Methylphenyl]sulfon- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 169 bis 170° (*Am.* 31, 182 *C.* 1904 [1] 877). — \*III, 169.
- $C_{22}H_{20}O_4N_2$  19) 1,3-Di[Phenylamidomethyl]benzol-1<sup>2</sup>,3<sup>2</sup>-Dicarbonsäure (m-Xylylendianthranilsäure). Sm. 247° u. Zers.  $K_2$ , Ca,  $Fe_2$  (*B.* 36, 1674 *C.* 1903 [2] 28).
- $C_{22}H_{20}O_4N_4$  \*1) Phloroglucinbutanondisazobenzol. Sm. 234—235° (*Ar.* 242, 498 *C.* 1904 [2] 1418).
- 3)  $\alpha\alpha$ -Di[4-Nitrobenzyl]- $\beta$ -[4-Methylbenzyliden]hydrazin. Sm. 163° (*R.* 22, 439 *C.* 1904 [1] 15).
- 4) Äthylester d. 4,6-Diphenylazo-3,5-Dioxy-1-Methylbenzol-2-Carbonsäure. Sm. 186°. +  $C_2H_4O_2$  (*B.* 37, 1409 *C.* 1904 [1] 1416).
- $C_{22}H_{20}O_{10}N_3$  2)  $\alpha\delta$ -Di[2-Carboxybenzoylamido]butan- $\alpha\alpha$ -Dicarbonsäure +  $4H_2O$ . Sm. 101—106° (192—193° wasserfrei) (*C.* 1903 [2] 34).
- $C_{22}H_{20}O_{13}N_4$  C 48,2 — H 3,6 — O 38,0 — N 10,2 — M. G. 548.
- 1) 3,3'-Dinitroazoxybenzol-4,4'-Di[Isopropyl- $\beta\beta'$ -Dicarbonsäure] (*B.* 36, 2675 *C.* 1903 [2] 948).
- $C_{22}H_{21}ON$  10)  $\alpha$ -Oximido- $\alpha\gamma\gamma$ -Triphenylbutan. Sm. 163° (*Am.* 31, 658 *C.* 1904 [2] 447).
- 11)  $\gamma$ -Oximido- $\alpha\alpha\gamma$ -Triphenyl- $\beta$ -Methylpropan. Sm. 145° (*Am.* 31, 657 *C.* 1904 [2] 446).
- 12) N-Acetyl-2-Methylamidotriphenylmethan. Sm. 147,5—148,5° (*B.* 37, 3207 *C.* 1904 [2] 1473).
- $C_{22}H_{21}ON_5$  2)  $\alpha$ -[4-Methylphenyl]azomethylenamido- $\alpha$ -[4-Methylphenyl]- $\beta$ -Phenylharnstoff. Sm. 184—185° (*B.* 36, 1373 *C.* 1903 [1] 1343).
- $C_{22}H_{21}O_2N$  8) Benzyläther d. 4-Dimethylamido-3'-Oxydiphenylketon. Sm. 86° (*D.R.P.* 65952). — \*III, 153.
- 9)  $\alpha$ -[2-Naphtyl]amido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 114° (*Soc.* 85, 1175 *C.* 1904 [2] 1215).
- 10) Benzoat d. 4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 118 bis 118,5° (*A.* 334, 340 *C.* 1904 [2] 989).
- $C_{22}H_{21}O_4N$  3) Propylester d.  $\beta$ -Cyan- $\alpha\gamma$ -Dibenzoylpropan- $\beta$ -Carbonsäure. Sm. 114° (*A. ch.* [7] 10, 174). — \*II, 1188.
- $C_{22}H_{21}O_6N$  \*1) Monoacetat d. Chelidonin. Sm. 161° (*C.* 1904 [1] 1224).
- 2) Diäthylester d.  $\beta$ -Phthalylamido- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 105—106° (*C.* 1903 [2] 33).
- $C_{22}H_{21}O_{18}Br_3$  1) Dibromcarminsäurehydrobromid. HBr (*B.* 33, 152). — \*II, 1228.
- $C_{22}H_{21}N_3S$  1) Methyläther d.  $\alpha$ -[ $\alpha$ -Benzyl- $\beta$ -Benzylidenhydrazido]- $\alpha$ -Phenylimido- $\alpha$ -Merkaptomethan. Sm. 104° (*B.* 37, 2329 *C.* 1904 [2] 313).
- $C_{22}H_{22}ON_2$  15) 4-Dimethylamido-4'-Methylphenylamidodiphenylketon. Sm. 141 bis 142° (*D.R.P.* 44077). — \*III, 149.
- 16) Äthylbenzyl-4-Benzoylamidophenylamin. Sm. 131,5° (*A.* 334, 263 *C.* 1904 [2] 902).
- 17)  $\alpha$ -[4-Methylbenzoyl]- $\alpha\beta$ -Di[2-Methylphenyl]hydrazin. Sm. 132° (*C. r.* 137, 714 *C.* 1903 [2] 1428).
- $C_{22}H_{22}ON_4$  7) 3-Oxy-2,6-Di[Phenylhydrazonmethyl]-1,4-Dimethylbenzol. Sm. 209° u. Zers. (*B.* 35, 4105 *C.* 1903 [1] 149).
- $C_{22}H_{22}O_2N_2$  6) 3-Acetylamido-2-Methyl-1,2-Naphtakridin-4-Methylbenzol-sulfonat (*A.* 327, 122 *C.* 1903 [1] 1221).
- $C_{22}H_{22}O_3N_2$  4) Diacetylderivat d. 7-[4-Dimethylamidophenyl]amido-2-Oxy-naphtalin. Sm. 100° (*J. pr.* [2] 69, 244 *C.* 1904 [1] 1269).

- $C_{22}H_{22}O_3S$  1) Tri[4-Methylphenyl]methan- $\alpha$ -Sulfonsäure. Na +  $H_2O$  (B. 37, 3158 C. 1904 [2] 1048).
- $C_{22}H_{22}O_4N_6$  2) 2,4,2',4'-Tetraketo-5,5',5'-Tetramethyl-3,3'-Diphenyloktahydro-1,1'-Azoimidazol. Zers. bei 270° (C. 1904 [2] 1029).
- $C_{22}H_{22}O_4Br_2$  \*1) Diäthylester d. 1,3-Di[4-Bromphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (B. 37, 220 Anm. C. 1904 [1] 588).
- $C_{22}H_{22}O_4Br_4$  1)  $\beta\gamma$ -Tetrabrom- $\alpha\delta$ -Diphenyloktan- $\delta\epsilon$ -Dicarbonsäure. Sm. 201° (A. 331, 172 C. 1904 [1] 1212).
- $C_{22}H_{22}O_5N_2$  3) p-Amidobenzoessäureazodesmotroposantonin. Zers. bei 260° (B. 36, 1392 C. 1903 [1] 1360).
- $C_{22}H_{22}O_6N_2$  C 64,4 — H 5,4 — O 23,4 — N 6,8 — M. G. 410.
- 1) Di[Phenylmonamid] d. cis-Hexahydrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 172° (Soc. 83, 787 C. 1903 [2] 439).
- $C_{22}H_{22}O_6Cl_4$  1) 4,4'-Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan- $\alpha\beta$ -Diäthyläther. Sm. 139° (A. 325, 60 C. 1903 [1] 462).
- $C_{22}H_{22}ON$  C 83,3 — H 7,3 — O 5,0 — N 4,4 — M. G. 317.
- 1)  $\alpha$ -Benzylidenamido- $\alpha$ -[2-Oxy-1-Naphtyl]pentan ( $\beta$ -Naphtolvaleralbenzalamine). Sm. 154° (G. 33 [1] 22 C. 1903 [1] 925).
- 2) Tri[4-Methylphenyl]methylhydroxylamin. Sm. 103—105° (B. 37, 3161 C. 1904 [2] 1049).
- 3) 1-Butyl-3-Phenyl-1,3-Dihydro-4,2- $\beta$ -Naphtisoxazin. Sm. 128° (G. 33 [1] 22 C. 1903 [1] 925).
- 4) 3-Butyl-1-Phenyl-1,3-Dihydro-4,2- $\beta$ -Naphtisoxazin. Sm. 137° (G. 33 [1] 22 C. 1903 [1] 925).
- $C_{22}H_{22}ON_3$  2)  $\alpha$ -Phenylhydrazon- $\gamma$ -Hydroxylamido- $\alpha\gamma$ -Diphenylbutan. Sm. 125 bis 126° (A. 330, 231 C. 1904 [1] 944).
- 3) Phenylamid d. Di[2-Methylphenylamido]essigsäure. Sm. 166,5 bis 167,5° (A. 332, 262 C. 1904 [2] 699).
- $C_{22}H_{22}O_4N$  \*1) Gnoskopin (Ar. 241, 267 C. 1903 [2] 447).
- \*2) Dehydrocorydalin.  $HNO_3$  +  $2H_2O$  (Soc. 83, 619 C. 1903 [1] 1364).
- 6) Diacetat d. Methylapomorphin. +  $C_6H_6O$  (Sm. 85—90°) (B. 35, 4389 C. 1903 [1] 339).
- $C_{22}H_{22}O_5N$  3) Benzoylanhydrocotarninaceton. Sm. 124° (B. 37, 2750 C. 1904 [2] 546).
- 4) Acetylanhydrocotarninacetophenon. Sm. 139—140° (B. 37, 2749 C. 1904 [2] 546).
- $C_{22}H_{22}O_7N$  \*1) Narceotin (B. 36, 1527 C. 1903 [2] 50; Soc. 83, 617 C. 1903 [1] 590; Ar. 241, 259 C. 1903 [2] 447).
- $C_{22}H_{22}O_6N$  2) Acetat d. Tetramethylhamatoxylonoxim. Sm. 179—183° (B. 36, 3714 C. 1904 [1] 38).
- $C_{22}H_{22}N_3S$  1)  $\alpha$ -Aethyl- $\beta$ -[4-Aethylbenzylamidophenyl]thioharnstoff. Sm. 149° (A. 334, 264 C. 1904 [2] 902).
- $C_{22}H_{24}ON_2$  2) 4-Diäthylamidophenyl-4-Methylamido-1-Naphtylketon. Sm. 149° (D.R.P. 84655; B. 37, 1903 C. 1904 [2] 115). — \*III, 195.
- $C_{22}H_{24}O_2N_2$  3) 4,6-Dioxy-1,3-Di[4-Methylamidobenzyl]benzol. Sm. 174—175°.  $2HCl$ ,  $H_2SO_4$  (M. 23, 993 C. 1903 [1] 289).
- $C_{22}H_{24}O_3N_2$  3) p-Toluidinazodesmotroposantonin. Sm. 275° (B. 36, 1391 C. 1903 [1] 1359).
- $C_{22}H_{24}O_4N_3$  C 60,6 — H 6,4 — O 14,7 — N 19,3 — M. G. 436.
- 1) Benzylidenhydrad d. Benzylidentri[Amidoacetyl]amidoessigsäure. Sm. 228° (B. 37, 1298 C. 1904 [1] 1336).
- $C_{22}H_{24}O_6N_2$  3) Tetramethyläther d. 6,7-Dioxy-1-[6-Acetylamido-3,4-Dioxybenzyl]-isochinolin. Sm. 162°. +  $C_6H_6$  (Sm. 125°) (B. 37, 1934 C. 1904 [2] 129).
- 4) Diäthylester d. 1-Benzoyl-4-Phenyltetrahydropyrazol-3,5-Dicarbonsäure. Sm. 125° (B. 36, 3779 C. 1904 [1] 41).
- $C_{22}H_{24}O_6N_2$  \*5) 2-Methylphenylamid d. d-Diacetylweinsäure. Sm. 229° (Soc. 83, 1366 C. 1904 [1] 85).
- $C_{22}H_{24}O_{10}N_4$  C 52,4 — H 4,8 — O 31,7 — N 11,1 — M. G. 252.
- 1) Phenylisocrotonensäuremethylesterpseudonitrosit. Sm. 118° u. Zers. (A. 329, 250 C. 1904 [1] 31).
- $C_{22}H_{26}O_4N$  2) Tetramethyläther d. 6,7-Dioxy-2-Aethyl-1-[3,4-Dioxybenzyliden]-1,2-Dihydroisochinolin (N-Aethylisopapaverin). Sm. 101°. Pikrat (B. 37, 527 C. 1904 [1] 818).

- $C_{22}H_{25}O_4N_5$  C 62,4 — H 5,9 — O 15,1 — N 16,5 — M. G. 423.  
 1) Benzylidenhydrazid d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]-amidopropionsäure. Sm. 238° (*J. pr.* [2] 70, 125 *C.* 1904 [2] 1037).
- $C_{22}H_{25}O_5N$  C 68,9 — H 6,5 — O 20,9 — N 3,7 — M. G. 383.  
 1) Aethylester d. Anhydrocotarninphenyleessigsäure. Sm. 91—92°.  
 (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (*B.* 37, 2739 *C.* 1904 [2] 544).
- $C_{22}H_{25}O_6N$  \*1) Colchicin (*C.* 1903 [2] 1133).  
 6) Diacetat d. Oxycodin. Sm. 160—161° (*B.* 36, 3069 *C.* 1903 [2] 953).
- $C_{22}H_{25}O_{11}N$  \*1) Tetraacetylhelicinacyanhydrin. Sm. 162° (*B.* 36, 2579 *C.* 1903 [2] 621).
- $C_{22}H_{26}O_2N_2$  16) 3,5-Di[Benzoylamido]-1,1-Dimethylhexahydrobenzol. Sm. 263 bis 264° (*A.* 328, 110 *C.* 1903 [2] 245).
- $C_{22}H_{26}O_3N_2$  9) p-Toluidinazodesmotroposantonigesäure. Sm. 214° (*B.* 36, 1393 *C.* 1903 [1] 1360).  
 10) Cinchonidinkohlensäureäthylester. Sm. 85° (D.R.P. 91370; D.R.P. 118122 *C.* 1901 [1] 600; D.R.P. 123748 *C.* 1901 [2] 796). — \*III, 641.
- $C_{22}H_{26}O_4N_2$  11) Methylcarbonat d. Chinin. Sm. 123° (D.R.P. 91370). — \*III, 627.  
 $C_{22}H_{27}O_4N$  \*1) d-Corydalin (*Soc.* 83, 618 *C.* 1903 [1] 590).  
 $C_{22}H_{27}O_4N_3$  C 66,5 — H 6,8 — O 16,1 — N 10,6 — M. G. 397.  
 1)  $\alpha$ -[ $\alpha$ -Phenylureidoisocapronyl]amido- $\beta$ -Phenylpropionsäure. Sm. 193 bis 195° u. Zers. (*B.* 37, 3309 *C.* 1904 [2] 1306).  
 2) isom.  $\alpha$ -[ $\alpha$ -Phenylureidoisocapronyl]amido- $\beta$ -Phenylpropionsäure. Sm. 183—184° (*B.* 37, 3309 *C.* 1904 [2] 1306).
- $C_{22}H_{27}O_5N$  5) 3,4,3',4'-Tetramethyläther- $\beta$ -Aethyläther d.  $\alpha$ -[ $\beta$ -Oxyäthenyl]imido- $\alpha$ - $\beta$ -Di[3,4-Dioxyphenyl]äthan. Sd. 255—265°<sub>0,85</sub> (*A.* 329, 58 *C.* 1903 [2] 1448).
- $C_{22}H_{27}O_{12}N$  \*1) Tetraacetylglyko-o-Oxymandelsäureamid. Sm. 213° (*B.* 36, 2579 *C.* 1903 [2] 621).
- $C_{22}H_{28}ON_2$  2)  $\alpha$ -Acetyl- $\alpha$ -[2,4,6-Trimethylbenzyl]- $\beta$ -[2,4,6-Trimethylbenzyliden]-hydrazin. Sm. 155° (*C.* 1903 [1] 142).
- $C_{22}H_{28}O_3N_2$  13) Di[Phenylamid] d.  $\beta$ -Methylheptan- $\gamma$ - $\zeta$ -Dicarbonsäure. Sm. 231° (*C. r.* 136, 458 *C.* 1903 [1] 696).
- $C_{22}H_{29}O_2N_4$  3) 3,5-Di[Phenylamidoformylamido]-1,1-Dimethylhexahydrobenzol. Sm. 248° (*A.* 328, 110 *C.* 1903 [2] 245).
- $C_{22}H_{28}O_5N_2$  \*2) Yohimbin (oder  $C_{22}H_{28}O_5N_2$ ). Sm. 234—234,5°. HCl, HNO<sub>3</sub> (*C.* 1897 [2] 978; 1899 [1] 529; *B.* 37, 1759 *C.* 1904 [1] 1527; *B.* 36, 169 *C.* 1903 [1] 471).
- $C_{22}H_{28}O_6N_2$  2) Phenylhydrazon d. Glutakonylglutakonsäuretriäthylester. Sm. 126 bis 127° (*C. r.* 136, 693 *C.* 1903 [1] 960).
- $C_{22}H_{28}N_2Cl_2$  1) polym. Isoamyliden-4-Chlorphenylamin. Sm. 104° (*A.* 328, 129 *C.* 1903 [2] 790).
- $C_{22}H_{29}N_4S_4$  \*1) Dipropyläther d. Di[Benzylimidomerkaptomethyl]disulfid (*B.* 36, 2266 *C.* 1903 [2] 562).  
 2) Dibenzyläther d. Di[Propylimidomerkaptomethyl]disulfid. Fl. (*B.* 36, 2267 *C.* 1903 [2] 562).
- $C_{22}H_{29}ON_5$  \*1) Aethyläther d. 5-Oxy-3-Diäthylamido-4-Phenylazo-3-Methyl-1-Phenyl-2,3-Dihydropyrazol. Sm. 135—136° (*B.* 36, 1451 *C.* 1903 [1] 1360).
- $C_{22}H_{29}O_5N$  \*1) Aethyläther d. 4-Keto-1-[4-Oxy-2-Methyl-5-Isopropylphenyl]-imido-2-Methyl-5-Isopropyl-1,4-Dihydrobenzol (*B.* 36, 2889 *C.* 1903 [2] 875).
- $C_{22}H_{29}O_4N$  2) Methylhydroxyd d. Methylthebenindimethyläther. Salze siehe (*B.* 37, 2787 *C.* 1904 [2] 716).
- $C_{22}H_{30}O_2N_2$  2) O-Aethyläther d. 4-Oximido-1-[4-Oxy-2-Methyl-5-Isopropylphenyl]-imido-2-Methyl-5-Isopropyl-1,4-Dihydrobenzol. Sm. 124—125° (*B.* 36, 2890 *C.* 1903 [2] 875).  
 3) Di[l-Piperidylmethyläther] d. 2,6-Dioxynaphtalin. Sm. 215—220° u. Zers. (D.R.P. 89979). — \*IV, 18.
- $C_{22}H_{30}O_4Cl_4$  1) Dicaprylat d. 2,3,5,6-Tetrachlor-1,4-Dioxybenzol. Sm. 74° (*Bl.* [3] 29, 1121 *C.* 1904 [1] 259).
- $C_{22}H_{30}NJ$  1) Jodbenzylat d. d-2-Propyl-1-Benzylhexahydropyridin. Sm. 176° (*B.* 37, 3638 *C.* 1904 [2] 1511).
- $C_{22}H_{30}N_2J_2$  1) Dijodmethylat d.  $\alpha\beta$ -Di[1,2,3,4-Tetrahydro-1-Chinolyl]äthan. Sm. 206° u. Zers. (*B.* 36, 3800 *C.* 1904 [1] 21).

- $C_{22}H_{31}O_2N$  4) Monoäthyläther d. Di[4-Oxy-2-Methyl-5-Isopropylphenyl]amin (B. 36, 2891 C. 1903 [2] 875).
- $C_{22}H_{33}O_{10}Cl_3$  1) Verbindung (aus Camphersäure u. Trichloressigsäure) (R. 21, 354 C. 1903 [1] 150).
- $C_{22}H_{35}N_2J$  1) Jodbenzylat d. Spartein. Sm. 230° (Ar. 242, 517 C. 1904 [2] 1412).
- $C_{22}H_{34}O_{10}Cl_2$  1) Verbindung (aus Camphersäure u. Dichloressigsäure) (R. 21, 354 C. 1903 [1] 150).
- $C_{22}H_{35}O_3N$  C 73,1 — H 9,7 — O 13,3 — N 3,9 — M. G. 361.  
1) Bornylester d. Camphorylamidoessigsäure. HCl (Ar. 240, 651 C. 1903 [1] 399).
- $C_{22}H_{36}O_4N$  2) 2-Nitrophenylester d. Palmitinsäure. Sm. 51–52° (A. 332, 205 C. 1904 [2] 211).
- $C_{22}H_{36}O_4N_3$  C 65,2 — H 8,6 — O 15,8 — N 10,4 — M. G. 405.  
1) Trimethyläther d.  $\gamma$ -Semicarbazon- $\alpha$ -[2,4,5-Trioxyphenyl]- $\alpha$ -Dodeken. Sm. 151–152° (Ar. 242, 103 C. 1904 [1] 1008).
- $C_{22}H_{36}O_{10}Cl$  1) Verbindung (aus Camphersäure u. Chloressigsäure) (R. 21, 353 C. 1903 [1] 150).
- $C_{22}H_{36}O_4N_2$  C 67,4 — H 9,2 — O 16,3 — N 7,1 — M. G. 392.  
1) Verbindung (aus Nitrosodihydrolauroktam). Sm. 104° (Am. 32, 291 C. 1904 [2] 1222).
- $C_{22}H_{37}O_2N$  4) 2-Oxyphenylamid d. Palmitinsäure. Sm. 78–79° (A. 332, 207 C. 1904 [2] 211).
- $C_{22}H_{37}O_3N$  C 72,7 — H 10,2 — O 13,2 — N 3,9 — M. G. 363.  
1) Mentylester d. Camphorylamidoessigsäure. HCl (Ar. 240, 648 C. 1903 [1] 399).
- $C_{22}H_{38}O_2S_3$  1) Anhydrid d. Menthylxanthogensäure. Sm. 148–149° (C. 1904 [1] 1347).
- $C_{22}H_{38}O_2S_4$  \*1) Menthyldioxysulfocarbonat. Sm. 92,5–93° (C. 1904 [1] 1347; 1904 [2] 983).
- $C_{22}H_{39}OCl$  1) Chlorid d. Behenolsäure. Sm. 29–30° (B. 36, 3602 C. 1903 [2] 1314).
- $C_{22}H_{40}O_2N_2$  2) Oxamid d.  $\theta$ -Amido- $\beta$ - $\zeta$ -Dimethyl- $\beta$ -Okten. Sm. 96° (Bl. [3] 29, 1048 C. 1903 [2] 1439).
- $C_{22}H_{41}ON$  C 78,8 — H 12,2 — O 4,8 — N 4,2 — M. G. 335.  
1) Amid d. Behenolsäure. Sm. 90° (B. 36, 3602 C. 1903 [2] 1314).
- $C_{22}H_{41}O_2Br$  \*1) Brombrassidinsäure. Sm. 35° (B. 36, 3603 C. 1903 [2] 1314).
- $C_{22}H_{41}O_2J$  1) Jodphellansäure (M. 25, 293 C. 1904 [1] 1573).
- $C_{22}H_{41}O_3Br$  1) Säure (aus Dibromoxybehensäure). Sm. 44° (B. 36, 3604 C. 1903 [2] 1314).
- $C_{22}H_{42}O_2Br_2$  \*1) Dibrombehensäure (aus Brassidinsäure). Sm. 54° (J. pr. [2] 67, 312 C. 1903 [1] 1404).  
\*2) Dibrombehensäure (aus Erukasäure). Sm. 42–43° (J. pr. [2] 67, 310 C. 1903 [1] 1404).  
\*3) Dibrombehensäure (aus Isoerukasäure). Sm. 44–46° (G. 34 [2] 53 C. 1904 [2] 693).
- $C_{22}H_{42}N_4S_2$  1) Verbindung (aus Valeraldehyd, Piperidin u. Rubcanwasserstoff). Sm. 119° (C. 1899 [2] 1025). — \*IV, 18.
- $C_{22}H_{43}O_3Cl$  \*1) Chloroxybehensäure (aus Brassidinsäure) (B. 36, 3605 C. 1903 [2] 1314).
- $C_{22}H_{43}O_3Br$  1) Bromoxybehensäure (aus Brassidinsäure) (B. 36, 3605 C. 1903 [2] 1314).  
2) Bromoxybehensäure (aus Erukasäure) (B. 36, 3605 C. 1903 [2] 1314).
- $C_{22}H_{45}O_4Br$  1) Bromdioxybehensäure. Sm. 71° (B. 36, 3604 C. 1903 [2] 1314).
- $C_{22}H_{46}O_3N$  C 71,2 — H 12,1 — O 12,9 — N 3,8 — M. G. 371.  
1) Amidooxybehensäure. Sm. 86° (B. 36, 3606 C. 1903 [2] 1314).
- $C_{22}H_{47}O_8N_3$  C 46,7 — H 8,3 — O 22,7 — N 22,3 — M. G. 565.  
1) Kaseinokyrin.  $3H_2SO_4$  (C. 1904 [2] 908; H. 43, 46 C. 1904 [2] 1660).

## — 22 IV —

- $C_{22}H_{10}O_2N_3S_2$  1) Diisatinindophtenin (B. 37, 3351 C. 1904 [2] 1058).
- $C_{22}H_{14}O_6N_2Br_4$  1) 2,4,6,8-Tetrabrom-L,5-Di[Diäcetylamido]-9,10-Anthrachinon. Zers. oberh. 220° (B. 37, 4184 C. 1904 [2] 1742).

- $C_{22}H_{14}O_7N_4S_2$  1) Disazoverbindung (aus 4,4'-Diamidobiphenyl-2,2'-Disulfonsäure). Ba (*J. pr.* [2] 66, 573 *C.* 1903 [1] 520).
- $C_{22}H_{15}O_2N_2Cl$  2) 4-Keto-3-Benzoyl-2-[4-Chlorbenzyl]-3,4-Dihydro-1,3-Benz-diazin. Sm. 210° (*J. pr.* [2] 69, 22 *C.* 1904 [1] 640).
- $C_{22}H_{16}O_2N_2S$  1) 4-Keto-2-Phenylimido-3-Phenyl-5-[2-Oxybenzyliden]tetrahydrothiazol. Sm. 230—235° (*M.* 24, 516 *C.* 1903 [2] 837).
- $C_{22}H_{16}O_3NCl$  1) 6-Chlor-3-Aethylamidofluoran. Sm. 186° (D.R.P. 85885). — \*III, 574.  
2) Chlordimethylamidofluoran. Sm. 218° (D.R.P. 139727 *C.* 1903 [1] 796).  
3) Chloräthylamidofluoran (D.R.P. 139727 *C.* 1903 [1] 796).
- $C_{22}H_{16}O_6N_2Br_2$  1) 2,6-Dibrom-1,5-Di[Diäcetylamido]-9,10-Anthrachinon. Zers. oberh. 240° (*B.* 37, 4183 *C.* 1904 [2] 1741).
- $C_{22}H_{18}O_2NJ$  1) Jodmethylat d. 5-Phenylakridin-5<sup>2</sup>-Carbonsäure. Sm. 226—227° (*B.* 37, 1008 *C.* 1904 [1] 1276).
- $C_{22}H_{19}O_2NBr_2$  1) N-Benzoylderivat d. Phenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 163—165° (*B.* 37, 3940 *C.* 1904 [2] 1597).  
2) Benzoat d. Phenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 174—175° (*B.* 37, 3939 *C.* 1904 [2] 1597).
- $C_{22}H_{19}O_2NS$  2) 3,4-Methylenäther d. 4-[3,4-Dioxybenzyliden]amido-3,4'-Dimethyldiphenylsulfid. HCl (*J. pr.* [2] 68, 288 *C.* 1903 [2] 995).
- $C_{22}H_{19}O_2N_2Br_3$  \* 1) 2,5,6-Tribrom-4-Oxy-1-Phenylamidomethyl-3-Acetylphenylamidomethylbenzol. Sm. 209° (*A.* 332, 180 *C.* 1904 [2] 209; *B.* 37, 3907 *C.* 1904 [2] 1592).
- $C_{22}H_{20}O_2N_2S$  3) 4-[4-Methylphenyl]merkpto-2-Methylphenylamid d. Phenyl-oxaminsäure. Sm. 238° (*J. pr.* [2] 68, 284 *C.* 1903 [2] 995).
- $C_{22}H_{20}N_8JS$  1) Methyläther d. 5-Jod-3-Merkpto-1,5-Diphenyl-4-Benzyl-4,5-Dihydro-1,2,4-Triazol. Sm. 176° (*J. pr.* [2] 67, 228 *C.* 1903 [1] 1261).  
2) Methyläther d. 5-Jod-3-Merkpto-4,5-Diphenyl-1'-4-Methylphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 216° (*J. pr.* [2] 67, 261 *C.* 1903 [1] 1266).  
3) Äthyläther d. 5-Jod-3-Merkpto-1,4,5-Triphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 304° u. Zers. (*J. pr.* [2] 67, 243 *C.* 1903 [1] 1263).
- $C_{22}H_{21}ON_3S$  2) 3-Methyläther d. 3-Merkpto-5-Oxy-1,5-Diphenyl-4-Benzyl-4,5-Dihydro-1,2,4-Triazol. Sm. 135° (*J. pr.* [2] 67, 262 *C.* 1903 [2] 1262).  
3) 3-Methyläther d. 3-Merkpto-5-Oxy-4,5-Diphenyl-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 136° (*J. pr.* [2] 67, 262 *C.* 1903 [1] 1266).  
4) 3-Äthyläther d. 3-Merkpto-5-Oxy-1,4,5-Triphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 153° (*J. pr.* [2] 67, 244 *C.* 1903 [1] 1264).
- $C_{22}H_{21}O_2NS$  1) 3-Methyläther d. 4-[3,4-Dioxybenzyliden]amido-3,4'-Dimethyldiphenylsulfid. HCl (*J. pr.* [2] 68, 288 *C.* 1903 [2] 995).
- $C_{22}H_{22}O_3N_4S_2$  1) Phenylhydrazid d.  $\alpha$ -Phenylthiosulfon- $\beta$ -Phenylhydrazonbutter-säure. Sm. 134—135° (*J. pr.* [2] 70, 384 *C.* 1904 [2] 1720).
- $C_{22}H_{22}O_4N_2Br_4$  1) Diacetat d. 1,4-Di[3,5-Dibrom-2-Oxybenzyl]hexahydro-1,4-Diazin. Sm. 199—201° (*A.* 332, 223 *C.* 1904 [2] 203).
- $C_{22}H_{24}O_{10}N_2S_2$  1) 4,4'-Di[Diäcetylamido]-3,3'-Dimethylbiphenyl-6,6'-Disulfon-säure. Na<sub>2</sub> (*J. pr.* [2] 66, 570 *C.* 1903 [1] 519).
- $C_{22}H_{24}O_{12}N_2S_2$  1) Benzol-1,3-Disulfonsäure + 2 Molec. 3-Amido-4-Oxybenzol-1-Carbonsäuremethylester. Sm. 142° u. Zers. (D.R.P. 150 070 *C.* 1904 [1] 975).
- $C_{22}H_{25}O_8N_2J$  2) Jodmethylat d. Anhydrocotarninbenzylecyanid. Sm. 225—227° (*B.* 37, 3337 *C.* 1904 [2] 1156).
- $C_{22}H_{26}O_4NJ$  3) Jodmethylat d. Anhydromethylcotarninacetophenon. Sm. 225 bis 226° (*B.* 37, 2748 *C.* 1904 [2] 546).
- $C_{22}H_{28}N_3SP$  1) Äthylphenylmonamid-Di[4-Methylphenylamid] d. Thiophosphorsäure. Sm. 158° (*A.* 326, 258 *C.* 1903 [1] 869).
- $C_{22}H_{28}O_8NJ$  2) Jodmethylat d. Methylthebenindimethyläther. Sm. 247° (*B.* 37, 2787 *C.* 1904 [2] 716).
- $C_{22}H_{28}O_4NJ$  6) Jodmethylat d. Phenanthreno-N-Methyltetrahydropapaverin. Sm. 215° (*B.* 37, 1941 *C.* 1904 [2] 130).

- $C_{22}H_{30}O_3N_2S$  1) 4-Amido-4'-Sulfomethylamidodi[1-Naphtyl]methan. Sm. 193 bis 195° (D.R.P. 148760 *C.* 1904 [1] 555).
- $C_{22}H_{34}ON_3P$  1) Diisobutylmonamid-Di[4-Methylphenylamid] d. Phosphorsäure. Sm. 180° (*A.* 326, 186 *C.* 1903 [1] 820).
- $C_{22}H_{34}N_3SP$  1) Diamylmonamid-Di-[Phenylamid] d. Thiophosphorsäure. Sm. 141° (*A.* 326, 213 *C.* 1903 [1] 822).
- $C_{22}H_{41}ON_2P$  1) Phenyläther d. Di[Diisobutylamido]oxyphosphin. Fl. (*A.* 326, 168 *C.* 1903 [1] 762).

## — 22 V —

- $C_{22}H_{14}O_6N_6Cl_2S$  1) 8-Amido-2-[4-Nitrophenyl]azo-7-[2,4-Dichlorphenyl]azo-1-Oxynaphtalin-4-Sulfonsäure (*C.* 1903 [1] 676).
- $C_{22}H_{31}O_3N_4ClS_2$  1) Phenylhydrazid d.  $\alpha$ -[4-Chlorphenylthiosulfon]- $\beta$ -Phenylhydrazonbuttersäure. Sm. 160—161° u. Zers. (*J. pr.* [2] 70, 388 *C.* 1904 [2] 1720).
- $C_{22}H_{31}O_3N_4BrS_2$  1) Phenylhydrazid d.  $\alpha$ -[4-Bromphenylthiosulfon]- $\beta$ -Phenylhydrazonbuttersäure. Sm. 168—169° u. Zers. (*J. pr.* [2] 70, 389 *C.* 1904 [2] 1720).
- $C_{22}H_{31}O_3N_4JS_2$  1) Phenylhydrazid d.  $\alpha$ -[4-Jodphenylthiosulfon]- $\beta$ -Phenylhydrazonbuttersäure. Sm. 167—168° u. Zers. (*J. pr.* [2] 70, 390 *C.* 1904 [2] 1721).
- $C_{22}H_{28}O_2N_2Br_2J$  1) Jodmethylat d. isom. Dibromstrychnin. Sm. 243° (*Bl.* [3] 31, 389 *C.* 1904 [1] 1280).
- $C_{22}H_{24}O_2N_2BrJ$  2) Jodmethylat d. isom. Bromstrychnin. Sm. 298° (*Bl.* [3] 31, 387 *C.* 1904 [1] 1279).
- $C_{22}H_{25}O_6NBrJ$  1) Jodmethylat d. Diacetylbrommorphin +  $1\frac{1}{2}H_2O$ . Sm. 200° (*A.* 297, 216). — \*III, 670.
- $C_{22}H_{28}O_3NBr_2J$  1) Acetat d. 3,6-Dibrom-4'-Diäthylamido-4-Oxy-2,5-Dimethyldiphenylmethanjodmethylat. Sm. 191—192° (*A.* 334, 317 *C.* 1904 [2] 987).
- $C_{22}H_{32}O_2NSP$  1) Diamylmonamid d. Thiophosphorsäurediphenylester. Sm. 64° (*A.* 326, 213 *C.* 1903 [1] 822).

 **$C_{23}$ -Gruppe.**

- $C_{23}H_{18}$  4) Diphenyl-1-Naphtylmethan. Sm. 150° (149°) (*B.* 13, 358; *B.* 37, 617 *C.* 1904 [1] 811; *B.* 37, 2756 *C.* 1904 [2] 707). — I, 299.
- $C_{23}H_{34}$  C 89,0 — H 11,0 — M. G. 310.
- 1) Kohlenwasserstoff (aus Cholesterylchlorid). Sd. 270—286°<sub>37-40</sub> (*M.* 24, 663 *C.* 1903 [2] 1236).

## — 23 II —

- $C_{23}H_{14}O_5$  C 74,6 — H 3,8 — O 21,6 — M. G. 370.
- 1) Laktone d. 4-Oxy-7-Benzoxyl-2-Phenyl-1,4-Benzpyran-4-Carbonsäure. Sm. 192° u. Zers. (*B.* 36, 1950 *C.* 1903 [2] 296).
- $C_{23}H_{16}O_6$  9)  $\beta$ -[3,4-Dibenzoxylphenyl]akrylsäure. Sm. 204—206° (*B.* 36, 2935 *C.* 1903 [2] 888).
- $C_{23}H_{17}Cl$  2)  $\alpha$ -Chlordiphenyl-1-Naphtylmethan. Sm. 169° (*B.* 37, 1637 *C.* 1904 [1] 1649).
- $C_{23}H_{18}O$  4)  $\alpha$ -Oxydiphenyl-1-Naphtylmethan. Sm. 135° (*Ann.* 29, 602 *C.* 1903 [2] 197; *B.* 37, 627 *C.* 1904 [1] 810; *B.* 37, 1638 *C.* 1904 [1] 1649; *B.* 37, 2755 *C.* 1904 [2] 707).
- $C_{23}H_{18}O_4$  7) 4<sup>3,5</sup>-Dimethyläther d. chinoiden 7-Oxy-4-[3,5-Dioxyphenyl]-2-Phenyl-1,4-Benzpyran. ( $HCl + 1\frac{1}{2}H_2O$ , (2HCl,  $PtCl_4$ ),  $H_2SO_4 + 1\frac{1}{2}H_2O$ , Pikrat (*B.* 36, 2296 *C.* 1903 [2] 577).
- $C_{23}H_{18}O_5$  3) 4<sup>3,5</sup>-Dimethyläther d. 5-Oxy-2-Phenyl-4-[3,5-Dioxyphenyl]-1,7-Benzpyron +  $H_2O$ . Sm. 215—220°. Pikrat (*B.* 36, 3609 *C.* 1903 [2] 1381).
- 4) 4<sup>3,5</sup>-Dimethyläther d. 8-Oxy-2-Phenyl-4-[3,5-Dioxyphenyl]-1,7-Benzpyron. Sm. 225—230°.  $HCl + H_2O$ , Pikrat (*B.* 36, 3607 *C.* 1903 [2] 1381).

- $C_{23}H_{18}O_{10}$  \*1) Tetraacetat d. 3,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (T. d. Fisetin). Sm. 200—201° (B. 37, 791 C. 1904 [1] 1158).  
 \*7) Tetraacetat d. 3,5,7-Trioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (T. d. Kämpferol). Sm. 181° (B. 37, 2099 C. 1904 [2] 121).  
 \*8) Tetraacetat d. Robigenin. Sm. 182—183° (Ar. 242, 223 C. 1904 [1] 1651).  
 9) Tetraacetat d. 3,6-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 197—198° (B. 37, 781 C. 1904 [1] 1156).  
 10) Tetraacetat d. 3,7,8-Trioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 166—167° (B. 37, 2633 C. 1904 [2] 540).
- $C_{23}H_{18}N_4$  4)  $\alpha$ -Phenylazo- $\alpha$ -[2-Naphtyl]hydrazon- $\alpha$ -Phenylmethan. Sm. 150° (C. 1903 [2] 427).  
 5)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Naphtyl]azo- $\alpha$ -Phenylmethan. Sm. 172° (C. 1903 [2] 427).
- $C_{23}H_{19}N$  3)  $\gamma$ -Phenylimido- $\alpha\delta$ -Diphenyl- $\alpha\delta$ -Pentadiën. Sm. 127° (C. 1903 [1] 399).  
 $C_{23}H_{20}O_4$  6) Dibenzot d. 4,6-Dioxy-1,2,3-Trimethylbenzol. Sm. 191° (A. 329, 309 C. 1904 [1] 794).
- $C_{23}H_{20}O_5$  5) 4<sup>3b</sup>-Dimethyläther d. 4,7-Dioxy-4-[3,5-Dioxyphenyl]-2-Phenyl-1,4-Benzpyran. Sm. 110° (B. 36, 2298 C. 1903 [2] 577).
- $C_{23}H_{20}O_8$  5) Aloresinotannol (Ar. 241, 356 C. 1903 [2] 726).  
 6) Diacetat d. Pentaoxybrasandimethyläther. Sm. 254—255° (B. 36, 2201 C. 1903 [2] 381).  
 $C_{23}H_{20}O_9$  C 62,7 — H 4,5 — O 32,7 — M. G. 440.  
 1) Tetraacetat d. Butein. Sm. 129—131° (C. 1904 [2] 451).
- $C_{23}H_{20}O_{11}$  2) Pentamethylester d. Diphenylketon-2,4,6,3',5'-Pentacarbonsäure. Sm. 146—147° (B. 33, 343). — \*II, 1231.
- $C_{23}H_{20}N_2$  \*6)  $\gamma$ -Phenylhydrazon- $\alpha\delta$ -Diphenyl- $\alpha\delta$ -Pentadiën. Sm. 147° (C. 1903 [1] 399).  
 8)  $\gamma$ -Phenylhydrazon- $\alpha\delta$ -Diphenyl- $\alpha\delta$ -Pentadiën. Sm. 152—153° (Soc. 85, 1179 C. 1904 [2] 1216).
- $C_{23}H_{20}N_4$  3) 4,4'-Di[Methylecyanamido]triphenylmethan. Sm. 163° (B. 37, 637 C. 1904 [1] 950).  
 $C_{23}H_{21}N$  C 88,7 — H 6,8 — N 4,5 — M. G. 311.
- 1) 2,6-Di[ $\beta$ -4-Methylphenyläthenyl]pyridin. Sm. 202°. HCl + H<sub>2</sub>O, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr + H<sub>2</sub>O, Pikrat (B. 36, 1685 C. 1903 [2] 46).  
 2) 1,3,7,9-Tetramethyl-5-Phenylakridin. Sm. 152° (B. 36, 1021 C. 1903 [1] 1268).  
 3) Nitril d. Tri[4-Methylphenyl]essigsäure. Sm. 192° (B. 37, 3157 C. 1904 [2] 1048).  
 $C_{23}H_{21}N_3$  C 81,4 — H 6,2 — N 12,4 — M. G. 339.
- 1) 1,3,5-Tri[4-Methylphenyl]-1,2,4-Triazol. Sm. 134° (J. pr. [2] 67, 489 C. 1903 [2] 250).  
 2) 1-[2-Methylphenyl]-3,5-Di[4-Methylphenyl]-1,2,4-Triazol. Sm. 137° (J. pr. [2] 67, 485 C. 1903 [2] 250).
- $C_{23}H_{22}O$  \*5)  $\alpha\alpha\delta$ -Triphenylpentan- $\alpha\delta$ -Oxyd. Sm. 74° (C. 1903 [1] 225).  
 $C_{23}H_{22}O_3$  4) Äthylester d. 4-Keto-6-Phenyl-2-[ $\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 142° (C. 1903 [2] 944).
- $C_{23}H_{22}O_4$  2) 4<sup>3b</sup>-Dimethyläther d. 7-Oxy-4-[3,5-Dioxyphenyl]-2-Phenyl-2,3-Dihydro-1,4-Benzpyran. Sm. 110° (B. 36, 2299 C. 1903 [2] 577).  
 3) Methylester d. 3,3'-Dioxytriphenylessigdimethyläthersäure. Sm. 168° (B. 37, 4037 C. 1904 [2] 1600).  
 4) Äthylester d. 4-Keto-1-Acetyl-2,6-Diphenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 164° (B. 36, 2135 C. 1903 [2] 367).
- $C_{23}H_{22}O_7$  2) Diacetat d. Verb. C<sub>19</sub>H<sub>18</sub>O<sub>8</sub>. Sm. 168° (M. 24, 214 C. 1903 [2] 38).  
 $C_{23}H_{22}O_{10}$  2) Zeorsäure. Sm. 235—236° (A. 327, 345 C. 1904 [2] 509).  
 $C_{23}H_{22}N_2$  6)  $\gamma$ -Phenylhydrazon- $\alpha\delta$ -Diphenyl- $\alpha$ -Penten. Sm. 116° (A. 330, 234 C. 1904 [1] 945).
- $C_{23}H_{22}N_4$  3) 1,3-Di[Benzylidenamido]-2-Phenyltetrahydroimidazol. Sm. 128° (J. pr. [2] 67, 143 C. 1903 [1] 865).  
 4) 3-[2,4,5-Trimethylphenyl]amido-1,5-Diphenyl-1,2,4-Triazol. Sm. 121—123° (Am. 32, 365 C. 1904 [2] 1507).
- $C_{23}H_{24}O_3$  7) Dimethyläther d. 3-Keto-2,4-Di[4-Oxybenzyliden]-1-Methylhexahydrobenzol. Sm. 110° (C. r. 136, 1225 C. 1903 [2] 116).

- $C_{23}H_{24}O_5$  C 72,6 — H 6,3 — O 21,1 — M. G. 380.  
1) Aethylester d.  $\beta\zeta$ -Diketo- $\varepsilon$ -Benzoyl- $\delta$ -Phenylheptan- $\gamma$ -Carbonsäure. Sm. 183° (B. 36, 2135 C. 1903 [2] 366).
- $C_{23}H_{24}O_7$  2) Diacetat d. Anhydrolariciresinol. Sm. 140° (M. 23, 1027 C. 1903 [1] 288).
- $C_{23}H_{24}N_2$  4)  $\alpha$ -[2,4-Dimethylphenyl]imido-4-Dimethylamidodiphenylmethan. Sm. 121° (D.R.P. 41751). — \*III, 150.  
5) 3-Dimethylamido-9-[4-Dimethylamidophenyl]fluoren. Sm. 149° (C. r. 137, 414 C. 1903 [2] 761).
- $C_{23}H_{26}O_2$  2)  $\alpha$ -Oxydiphenylmethylecampher. Sm. 122,5° (B. 35, 3912 C. 1903 [1] 29; B. 36, 2631 C. 1903 [2] 625).
- $C_{23}H_{26}O_7$  \*1) Tetraäthyläther d. Quercetin. Sm. 121° (Ar. 242, 237 C. 1904 [1] 1651).  
2) Ebernurool. Sm. 196° (J. pr. [2] 68, 22 C. 1903 [2] 511).  
3) Tetraäthyläther d. Morin. Sm. 126—128° (Soc. 85, 61 C. 1904 [1] 381, 729).
- $C_{23}H_{26}N_2$  \*2) 4,4'-Di[Dimethylamido]triphenylmethan (B. 37, 640 C. 1904 [1] 950).  
5)  $\alpha$ -Butyl- $\alpha\alpha$ -Di[2-Methyl-3-Indolyl]methan. Sm. 157° (B. 37, 323 C. 1904 [1] 668).
- $C_{23}H_{27}N_3$  \*1) 2'-Amido-4',4''-Di[Dimethylamido]triphenylmethan. Sm. 131 bis 133° (B. 36, 2785 C. 1903 [2] 881).
- $C_{23}H_{28}O_8$  2) Phloraspin. Sm. 211° (A. 329, 338 C. 1904 [1] 801).
- $C_{23}H_{28}N_2$  C 83,1 — H 8,4 — N 8,4 — M. G. 332.  
1)  $\varepsilon$ -[2,4,5-Trimethylphenyl]imido- $\alpha$ -[2,4,5-Trimethylphenyl]-amido- $\alpha\gamma$ -Pentadien. Sm. 93° u. Zers. HCl (A. 333, 325 C. 1904 [2] 1149).
- $C_{23}H_{30}O_{11}$  \*1) Tetraacetylglyko-o-Oxyphenyläthylcarbinol. Sm. 156° (B. 36, 2581 C. 1903 [2] 621).  
\*2) isom. Tetraacetylglyko-o-Oxyphenyläthylcarbinol. Sm. 128° (B. 36, 2582 C. 1903 [2] 621).
- $C_{23}H_{32}O_8$  C 77,5 — H 9,0 — O 13,5 — M. G. 356.  
1) Acetat d. Cannabinol. Fl. (C. 1903 [2] 199).
- $C_{23}H_{34}O_8$  C 63,0 — H 7,8 — O 29,2 — M. G. 438.  
1) Trimethylester d. Ciliansäure. Sm. 123—124° (M. 24, 62 C. 1903 [1] 766).
- $C_{23}H_{36}O_2$  3) Acetat d. Laktukol (Laktukon). Sm. 184° (C. 1904 [1] 1162; M. 25, 786 C. 1904 [2] 1137).
- $C_{23}H_{36}O_3$  C 76,7 — H 10,0 — O 13,3 — M. G. 360.  
1)  $\alpha$ -Oxy- $\alpha\alpha$ -Dicamphorylpropan. Sm. 158—160° (B. 36, 2638 C. 1903 [2] 626).
- $C_{23}H_{36}O_4$  C 73,4 — H 9,6 — O 17,0 — M. G. 376.  
1)  $\alpha$ -Masticinsäure. Sm. 90—91° (Ar. 242, 105 C. 1904 [1] 1010).  
2)  $\beta$ -Masticinsäure. Sm. 89,5—90,5° (Ar. 242, 106 C. 1904 [1] 1010).  
3) Masticolsäure. Sm. 201°. Ag (Ar. 242, 107 C. 1904 [1] 1010).
- $C_{23}H_{38}O_4$  2) Acetylcyklogallipharsäure. Sm. 71°. Ag (Ar. 242, 262 C. 1904 [1] 1653).
- $C_{23}H_{38}O_{10}$  C 58,2 — H 8,0 — O 33,8 — M. G. 474.  
1) Sapotoxin. Sm. 172° (C. 1904 [2] 119).
- $C_{23}H_{40}O_8$  C 75,8 — H 11,0 — O 13,2 — M. G. 364.  
1) Aethylester d. Cyklogallipharsäure. Sm. 37° (Ar. 242, 264 C. 1904 [1] 1654).
- $C_{23}H_{42}O_4$  2) Aethylester d. Propionylricinolsäure. Sd. 265°<sub>13</sub> (B. 36, 787 C. 1903 [1] 824).  
3) Propylester d. Acetylricinolsäure. Sd. 260°<sub>13</sub> (B. 36, 786 C. 1903 [1] 824).
- $C_{23}H_{44}O_2$  3) Isoamylester d. Oelsäure. Fl. (C. r. 138, 378 C. 1904 [1] 787).
- $C_{23}H_{46}O_2$  \*2) Isoamylester d. Stearinsäure. Sm. 21° (C. r. 138, 379 C. 1904 [1] 787).
- $C_{23}H_{46}N_4$  \*1) Amidoguanidinverbindung d.  $\mu$ -Keto- $\kappa$ -Methyl- $\kappa$ -Heneikosen. Pikrat (B. 36, 2557 C. 1903 [2] 655).

- $C_{23}H_{14}O_7Cl_4$  1) Trimethyläther d. Tetrachlordioxyfluorescein. Sm. 245° (*B.* 36, 1078 *C.* 1903 [1] 1182).
- $C_{23}H_{15}O_8N$  1) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Benzoyl- $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]-propan- $\gamma$ -Carbonsäure. Sm. 162° (*A.* 333, 236 *C.* 1904 [2] 1390).  
C 68,8 — H 3,7 — O 23,9 — N 3,5 — M. G. 401.
- $C_{23}H_{16}O_7N_4$  1) 1-Benzoylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 131—132° (*Soc.* 83, 1340 *C.* 1904 [1] 99).
- $C_{23}H_{16}O_7Cl_2$  1) Trimethyläther d. Dichlordioxyfluorescein (*B.* 36, 1081 *C.* 1903 [1] 1182).
- $C_{23}H_{17}O_9N$  9) Benzoat d. 7-Oxy-2-Methyl-4-Phenylchinolin. Sm. 144° (*B.* 36, 2456 *C.* 1903 [2] 670).
- $C_{23}H_{17}O_9N_3$  11) Benzoat d. 4-Amido-1-[4-Oxyphenylazo]naphtalin. Sm. 183—184° (*B.* 36, 4148 *C.* 1904 [1] 186).
- $C_{23}H_{17}O_9N_3$  4) Di[1-Naphtylamid] d. Oximidomalonsäure. Sm. 184°. K (*Soc.* 83, 40 *C.* 1903 [1] 73, 442).
- 5) Di[2-Naphtylamid] d. Oximidomalonsäure. Sm. 221° (*Soc.* 83, 41 *C.* 1903 [1] 73, 442).
- $C_{23}H_{18}O_9N_2$  13) 6-Keto-5-Benzoyl-2,4-Diphenyl-3,4,5,6-Tetrahydro-1,3-Diazin. Sm. 241—242° (*Soc.* 83, 722 *C.* 1903 [2] 54).
- 14) Di[1-Naphtylamid] d. Malonsäure. Sm. 225° (*Soc.* 83, 40 *C.* 1903 [1] 442).
- 15) Di[2-Naphtylamid] d. Malonsäure. Sm. 235° (*Soc.* 83, 41 *C.* 1903 [1] 442).
- $C_{23}H_{18}O_9N_2$  5) 4-Acetylamido-1-[4-Methylphenyl]amido-9,10-Anthrachinon. Sm. 193° (D. R. P. 148767 *C.* 1904 [1] 557).
- 6) Benzoat d. 4-Oxy-3-Keto-1-Methyl-2,5-Diphenyl-2,3-Dihydropyrazol. Sm. 190° (*B.* 36, 1138 *C.* 1903 [1] 1254).
- $C_{23}H_{19}ON_3$  6) 5-Phenylamido-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 171° (*B.* 36, 525 *C.* 1903 [1] 641).
- $C_{23}H_{19}O_4N$  4) Oxim d. chinoiden 7-Oxy-4-[3,5-Dioxyphenyl]-2-Phenyl-1,4-Benzpyran-4<sup>35</sup>-Dimethyläther. Sm. 60—65° (*B.* 36, 2300 *C.* 1903 [2] 577).
- 5) Methyläther d. Dimethylrhodol. HCl (D. R. P. 122289). — \*III, 578.
- $C_{23}H_{19}O_8N$  \*1) 3-Nitrobenzylidendivanillin (*B.* 36, 3977 *Ann.* *C.* 1904 [1] 373).
- $C_{23}H_{19}N_4Cl$  1) 5-Chlor-4-[ $\alpha$ -Phenylhydrazonbenzyl]-3-Methyl-1-Phenylpyrazol. Sm. 176° (*B.* 36, 526 *C.* 1903 [1] 641).
- $C_{23}H_{20}ON_2$  7) 3,7-Dimethyl-5-[3-Acetylamidophenyl]akridin. Sm. 280° (*B.* 36, 1024 *C.* 1903 [1] 1268).
- 8) Verbindung (aus 2-Methylindol u. Furfuröl). Sm. 220° (*B.* 36, 4327 *C.* 1904 [1] 462).
- $C_{23}H_{20}ON_4$  C 75,0 — H 5,4 — O 4,3 — N 15,2 — M. G. 368.
- 1)  $\alpha$ -Oxy-4,4'-Di[Methylecyanamido]triphenylmethan. Sm. 168° (*B.* 37, 641 *C.* 1904 [1] 951).
- 2) 5-Keto-4-[4-Dimethylamidophenyl]imido-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 218,5° (*B.* 36, 1133 *C.* 1903 [1] 1253).
- $C_{23}H_{20}O_2N_2$  11) Phenylamidoformiat d. syn- $\alpha$ -Oximido- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten. Sm. 149—150° (*M.* 25, 437 *C.* 1904 [2] 336).
- $C_{23}H_{20}O_3N_2$  2) Benzoat d. 4-Oxy-3-Acetylphenylhydrazonmethyl-1-Methylbenzol. Sm. 140° (*B.* 35, 4107 *C.* 1903 [1] 150).
- $C_{23}H_{20}O_4N_2$  2) Dimethyläther d.  $\beta$ -Phenylazo- $\alpha\gamma$ -Diketo- $\gamma$ -Phenyl- $\alpha$ -[3,5-Dioxyphenyl]propan. Sm. 108° (*B.* 35, 3904 *C.* 1903 [1] 27).
- $C_{23}H_{20}O_4S_2$  4) 2,5-Diacetat d. 3,6-Dimerkapto-2,5-Dioxy-1-Methylbenzol-3,6-Diphenyläther. Sm. 121—122° (*A.* 336, 161 *C.* 1904 [2] 1300).
- $C_{23}H_{20}N_3Cl$  1) 1-[4-Chlor-2-Methylphenyl]-3,5-Di[4-Methylphenyl]-1,2,4-Triazol. Sm. 170° (*J. pr.* [2] 67, 502 *C.* 1903 [2] 251).
- $C_{23}H_{21}ON$  3) d- $\gamma$ -[ $\beta$ -Oxy- $\alpha\beta$ -Diphenyläthyl]imido- $\alpha$ -Phenylpropen. Sm. 189—190° u. Zers. (*B.* 36, 2343 *C.* 1903 [2] 410).
- 4) isom. d- $\gamma$ -[ $\beta$ -Oxy- $\alpha\beta$ -Diphenyläthyl]imido- $\alpha$ -Phenylpropen. Sm. 131° (*B.* 36, 2343 *C.* 1903 [2] 410).
- 5) l- $\gamma$ -[ $\beta$ -Oxy- $\alpha\beta$ -Diphenyläthyl]imido- $\alpha$ -Phenylpropen. Sm. 189—190° u. Zers. (*B.* 36, 2343 *C.* 1903 [2] 410).

- $C_{23}H_{21}ON$  6) isom. 1- $\gamma$ -[ $\beta$ -Oxy- $\alpha\beta$ -Diphenyläthyl]imido- $\alpha$ -Phenylpropen. Sm. 131° (B. 36, 2343 C. 1903 [2] 410).  
 7)  $r$ - $\gamma$ -[ $\beta$ -Oxy- $\alpha\beta$ -Diphenyläthyl]imido- $\alpha$ -Phenylpropen. Sm. 186° (B. 36, 2342 C. 1903 [2] 410).  
 8) 4-Keto-1,2,6-Triphenylhexahydropyridin. Sm. 220–221° (Bl. [3] 31, 985 C. 1904 [2] 1151).
- $C_{23}H_{21}O_2N$  10)  $s$ -Oximido- $\alpha$ -Keto- $\alpha\gamma\epsilon$ -Trimethylpentan. Sm. 144° (A. 302, 242). — \*III, 237.
- $C_{23}H_{21}O_3Cl$  1) Dimethyläther d.  $\gamma$ -Chlor- $\alpha$ -Keto- $\alpha\beta$ -Diphenyl- $\gamma$ -[3,4-Dioxyphenyl]-propen. Sm. 164° (B. 35, 3972 C. 1903 [1] 31).
- $C_{23}H_{21}O_4N$  3) Trimethyläther d. Phenolphthaleinoxim. Sm. 145–146° (B. 36, 2964 C. 1903 [2] 1007).  
 C 67,8 — H 5,2 — O 23,6 — N 3,4 — M. G. 407.
- $C_{23}H_{21}O_6N$  1) Diacetat d. 2-Keto-5,6-Dioxy-1-[4-Dimethylamidocinnamyliden]-1,2-Dihydrobenzofuran. Sm. 206° (B. 37, 827 C. 1904 [1] 1152).
- $C_{23}H_{21}NBr_4$  1) 2,6-Di[ $\alpha\beta$ -Dibrom- $\beta$ -4-Methylphenyläthyl]pyridin. Sm. 182° (B. 36, 1686 C. 1903 [2] 47).
- $C_{23}H_{21}NS$  1)  $\alpha$ -Rhodantri[4-Methylphenyl]methan. Sm. 147–148° (B. 37, 3157 C. 1904 [2] 1048).  
 2) 4-Cinnamylidenamido-3,4'-Dimethyldiphenylsulfid. HCl (J. pr. [2] 68, 288 C. 1903 [2] 995).
- $C_{23}H_{22}ON_2$  7) 4-Oximido-1,2,6-Triphenylhexahydropyridin. Sm. 220–221° (Bl. [3] 31, 987 C. 1904 [2] 1151).  
 8) Monophenylhydrazon d. Dimethylphenyl- $m$ -Biscyklohexanon. Sm. 199° (B. 36, 2149 C. 1903 [2] 369).  
 9)  $N$ -Butyl- $o$ -Methylchinophthalin. Sm. 178° (B. 36, 3919 C. 1904 [1] 98).
- $C_{23}H_{22}OCl_2$  1) Dicinnamyliden cyclopentanondihydrochlorid (B. 36, 1478 C. 1903 [1] 1349).
- $C_{23}H_{22}OBr_2$  1) Dihydrobromid d. 2-Keto-1,3-Dicinnamyliden- $R$ -Pentamethylen (B. 36, 3545 C. 1903 [2] 1369).
- $C_{23}H_{22}OS$  1) Äthyläther d.  $\gamma$ -Keto- $\alpha$ -Merkapto- $\alpha\beta\gamma$ -Triphenylpropan. Sm. 172° (B. 37, 505 C. 1904 [1] 882).
- $C_{23}H_{22}O_3N_2$  17) 4,4'-Di[Acetylamido]triphenylmethan. Sm. 234–235°. +  $C_6H_6$  (C. 1904 [2] 227; B. 37, 2860 C. 1904 [2] 776).
- $C_{23}H_{22}O_3N_2$  6)  $\alpha$ -Oxy-4,4'-Di[Acetylamido]triphenylmethan. Sm. 266–267° (B. 37, 2860 C. 1904 [2] 776).  
 7)  $\gamma$ -Phenylhydroxylureido- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylbutan (Phenylharnstoff aus Dypnonhydroxylamin). Sm. 127° (A. 330, 230 C. 1904 [1] 944).
- $C_{23}H_{22}O_3S$  2)  $\alpha$ -Keto- $\gamma$ -Benzylsulfon- $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropan. Sm. 152 bis 153° (B. 37, 507 C. 1904 [1] 883).  
 3)  $\gamma$ -Keto- $\alpha$ -Äthylsulfon- $\alpha\beta\gamma$ -Triphenylpropan. Sm. 206–207° (B. 37, 505 C. 1904 [1] 882).
- $C_{23}H_{23}ON$  3) Phenylbenzylamid d.  $d$ - $\beta$ -Phenylisobuttersäure. Sm. 69–70° (Soc. 85, 447 C. 1904 [1] 1445).  
 4) Phenylbenzylamid d.  $dl$ - $\beta$ -Phenylisobuttersäure. Sm. 69–70° (Soc. 85, 446 C. 1904 [1] 1445).
- $C_{23}H_{23}O_3N$  4) Äthylester d.  $\alpha$ -[Phenyl-2-Oxy-1-Naphtylmethyl]imidopropionsäure. Sm. 165° (G. 33 [1] 34 C. 1903 [1] 926).  
 5) Äthylester d. 5-Acetyl-2-Methyl-4,6-Diphenyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 174° (B. 36, 2188 C. 1903 [2] 569).  
 C 64,9 — H 5,4 — O 26,4 — N 3,3 — M. G. 425.
- $C_{23}H_{23}O_7N$  1) Triacetylbenzoyllepinephrin (H. 28, 333). — \*III, 667.
- $C_{23}H_{23}N_2J$  4) Jodmethylat d. cis-1-Methyl-2,4,5-Triphenyl-4,5-Dihydroimidazol. Sm. 247° (B. 13, 1420; 18, 3079; Soc. 77, 629). — \*III, 18.
- $C_{23}H_{24}ON_2$  2) 4-Dimethylamido-4'-Methylbenzylamidodiphenylketon. Sm. 136° (D. R. P. 72808). — \*III, 150.  
 3) 3-Dimethylamido-9-Oxy-9-[4-Dimethylamidophenyl]fluoren. Chlorid, Nitrat (C. r. 137, 414 C. 1903 [2] 761).
- $C_{23}H_{24}O_3N_2$  5) Protocatechualdehydblau +  $H_2O$ . 3HCl (B. 36, 2920 C. 1903 [2] 1066).
- $C_{23}H_{24}O_4N_2$  2) Strychninbetaïn. HCl, (2HCl,  $PtCl_4$  +  $3H_2O$ ) (A. 326, 329 C. 1903 [1] 1089).  
 3) Protocatechualdehydroth (B. 36, 2925 C. 1903 [2] 1066).

- $C_{23}H_{24}O_4N_2$  4) Aethylester d.  $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-4-Pyrazolyl]butan- $\beta$ -Carbonsäure. Sm. 160° (B. 36, 2127 C. 1903 [2] 365).
- 5) 3-Phenylhydrazid d. 4-Keto-5-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol-1,3-Dicarbonsäure-1-Aethylester. Sm. 171° (B. 36, 2125 C. 1903 [2] 365).
- $C_{23}H_{24}O_5S$  1)  $\alpha\gamma$ -Di[4-Methylphenylsulfon]- $\gamma$ -Oxy- $\alpha$ -Phenylpropan. Sm. 126° u. Zers. (Am. 31, 875 C. 1904 [1] 876).
- $C_{23}H_{24}O_6N_2$  1) Diäthylester d.  $\beta$ -Keto- $\alpha\alpha$ -Di[4-Nitrobenzyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 118—119° (B. 37, 1993 C. 1904 [2] 26).
- $C_{23}H_{24}NJ$  1) Jodmethylat d. 5-Methyl-2,4-Diphenyl-5,6,7,8-Tetrahydrochinolin. Sm. 204—206° (B. 35, 3981 C. 1903 [1] 37).
- $C_{23}H_{24}N_4S_2$  2) 4,4'-Di[ $\alpha$ -Methylthioureido]triphenylmethan. Sm. 200° (B. 37, 639 C. 1904 [1] 950).
- $C_{23}H_{25}O_5N$  \*1) Methyläther d. Diacetylthebenin. Sm. 179° (B. 37, 2787 C. 1904 [2] 716).
- $C_{23}H_{25}O_6N$  2) Aethylester d. Anhydrocotarninbenzoylessigsäure. Sm. 100—102° (2HCl, PtCl<sub>4</sub>) (B. 37, 2747 C. 1904 [2] 545).
- $C_{23}H_{25}N_2J$  \*1) Diäthylisocyaninjodid (Aethylroth) (R. 3, 346; B. 37, 2010 C. 1904 [2] 124).
- 2) Diäthylecyaninjodid (B. 37, 2821 C. 1904 [2] 662).
- $C_{23}H_{25}N_3J_3$  1) Diäthylecyanintrijodid (B. 37, 2823 C. 1904 [2] 662).
- 2) Diäthylisocyanintrijodid (B. 37, 2018 C. 1904 [2] 125).
- $C_{23}H_{26}ON_2$  \*3) Malachitgrün. Oxalat (B. 37, 635 C. 1904 [1] 950; B. 37, 3058 C. 1904 [2] 990; C. r. 139, 676 C. 1904 [2] 1653).
- 5) 4-Diäthylamidophenyl-4-Aethylamido-1-Naphtylketon. Sm. 130° (133,5°) (D.R.P. 84655; B. 37, 1903 C. 1904 [2] 115). — \*III, 194.
- 6) Diäthylisocyaninhydroxyd. Nitrat (B. 37, 2021 C. 1904 [2] 125).
- $C_{23}H_{26}OBr_2$  1) Dibromid d.  $\gamma$ -Keto- $\alpha\alpha$ -Di[4-Isopropylphenyl]- $\alpha\delta$ -Pentadien. Sm. 110° (B. 36, 3545 C. 1903 [2] 1369).
- $C_{23}H_{26}OBr_4$  1)  $\alpha\beta\delta$ -Tetrabrom- $\gamma$ -Keto- $\alpha\alpha$ -Di[4-Isopropylphenyl]pentan. Sm. 189° (B. 36, 3545 C. 1903 [2] 1369).
- $C_{23}H_{26}O_2N_2$  2) 4,4'-Di[Dimethylamido]-3,4-Dioxytriphenylmethan. Sm. 164° (B. 36, 2917 C. 1903 [2] 1065; B. 37, 3332 C. 1904 [2] 1050).
- $C_{23}H_{26}O_4N_2$  \*2) Brucein. Nitroprussidwasserstoffsalz + 5H<sub>2</sub>O (C. 1903 [2] 385).
- 8) 4,4'-Di[Dimethylamido]-3,4,2',2''-Tetraoxytriphenylmethan. Sm. 213° (B. 36, 2919 C. 1903 [2] 1065).
- $C_{23}H_{26}O_5N_4$  2)  $\beta$ -Dinitro-3,3'-Di[1-Piperidyl]diphenylketon. Sm. 190° (B. 37, 3485 C. 1904 [2] 1131).
- $C_{23}H_{28}O_5N_2$  C 60,3 — H 5,7 — O 27,9 — N 6,1 — M. G. 458.
- 1) Dimethylester d. Methylendi[Phenylamidoessigsäure-N-Carbonsäure]. Sm. 142—143° (C. 1903 [2] 835).
- $C_{23}H_{28}N_2S$  1)  $\alpha$ -Merkapto-4,4'-Di[Dimethylamido]triphenylmethan. Oxalat (B. 37, 3060 C. 1904 [2] 990).
- $C_{23}H_{27}ON_3$  6)  $\alpha$ -Oxy-2-Amido-4',4''-Di[Dimethylamido]triphenylmethan. Sm. 160° u. Zers. (B. 36, 2786 C. 1903 [2] 881).
- 7) Methyläther d.  $\alpha$ -Oxytri[4-Amido-3-Methylphenyl]methan. Sm. 178° (B. 37, 2875 C. 1904 [2] 778).
- 8) 5-Dipropylamido-4-Benzoyl-3-Methyl-1-Phenylpyrazol (B. 36, 526 C. 1903 [1] 641).
- $C_{23}H_{27}ON_5$  C 70,9 — H 6,9 — O 4,1 — N 18,0 — M. G. 389.
- 1) 4-Acetylamidophenyldi[4,6-Diamido-3-Methylphenyl]methan. Sm. 205° (C. 1903 [1] 884).
- $C_{23}H_{27}O_2N$  2) Diphenylamidoformiat d. Nerol. Sm. 73—75° (52—53°) (J. pr. [2] 66, 502 C. 1903 [1] 517; C. 1903 [2] 877). — \*III, 350.
- $C_{23}H_{27}O_8N$  4) Propylester d. Acetylmorphinkohlensäure. Sm. 120° (D.R.P. 106718). — \*III, 670.
- $C_{23}H_{27}O_8N$  \*1) Narcein (C. 1903 [2] 1011).
- $C_{23}H_{29}N_2Br$  1) 2,4,5-Trimethylbromphenylat d. 2-[2,4,5-Trimethylphenyl]amido-1,2-Dihydropyridin. Sm. 158° (J. pr. [2] 69, 125 C. 1904 [1] 815).
- $C_{23}H_{30}O_2N_2$  2) Piperidocodid. Sm. 118°. 2HCl (B. 36, 1572 C. 1903 [2] 54).
- $C_{23}H_{30}O_5S_2$  2)  $\gamma$ -Keto- $\alpha\alpha$ -Diäthylsulfon- $\alpha\alpha$ -Diphenyl- $\beta\delta$ -Dimethylpentan (B. 37, 509 C. 1904 [1] 884).

- $C_{23}H_{30}O_7S_2$  1) Dicuminyldenacetonebishydrosulfonsäure.  $K_2 + 3H_2O$  (B. 37, 4056 C. 1904 [2] 1649).
- $C_{23}H_{31}O_9N_7$  C 50,3 — H 5,6 — O 26,2 — N 17,9 — M. G. 549.
- 1) Aethylester d. Benzoylhexa[Amidoacetyl]amidoessigsäure. Sm. 274—277° (J. pr. [2] 70, 101 C. 1904 [2] 1035).
- $C_{23}H_{38}O_7N$  C 63,5 — H 7,6 — O 25,7 — N 3,2 — M. G. 435.
- 1) Verbindung (aus Delphocurarin). Sm. 184—185°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (C. 1903 [1] 1188). — \*III, 656.
- $C_{23}H_{34}N_2Br_2$  1) Spartein-o-Xylylenammoniumbromid. Sm. 237° (Ar. 242, 520 C. 1904 [2] 1413).
- $C_{23}H_{35}O_2Br_3$  1) Palmitat d. 3,5-Dibrom-2-Oxy-1-Brommethylbenzol. Sm. 75° (A. 332, 202 C. 1904 [2] 211).
- $C_{23}H_{39}O_2Br_2$  1) Acetat d. Laktukoldibromid (Laktukondibromid) (C. 1904 [1] 1162; M. 25, 791 C. 1904 [2] 1138).
- $C_{23}H_{38}O_3Br_2$  1) Aethylester d. Dibromcyklogallipharsäure. Sm. 46° (Ar. 242, 265 C. 1904 [1] 1654).
- $C_{23}H_{39}O_2N$  C 76,4 — H 10,8 — O 8,9 — N 3,9 — M. G. 361.
- 1) Phenylamidoformiat d. α-Oxyhexadekan. Sm. 73°; Sd. 310° u. Zers. (Bl. [3] 31, 52 C. 1904 [1] 507).
- $C_{23}H_{39}O_{10}N_7$  C 48,2 — H 6,8 — O 27,9 — N 17,1 — M. G. 573.
- 1) Pepsinglutinpepton (H. 38, 258 C. 1903 [2] 210; H. 41, 72 C. 1904 [1] 958).
- 2) Pepton (aus Gelatine) (H. 37, 364 C. 1903 [1] 364).
- $C_{23}H_{40}ON_2$  C 76,7 — H 11,1 — O 4,4 — N 7,8 — M. G. 360.
- 1) α-Aethyl-αβ-Dibornylharnstoff. Sm. 178° (Soc. 85, 1192 C. 1904 [2] 1125).

## — 23 IV —

- $C_{23}H_{14}O_3N_2Br_2$  1) p-Dibrom-o-Tolyldindigo (D.R.P. 154338 C. 1904 [2] 1080).
- $C_{23}H_{15}O_3N_2Br$  3) p-Brom-o-Tolyldindigo (D.R.P. 154338 C. 1904 [2] 1080).
- $C_{23}H_{16}O_3N_2S$  1) 3,4-Methylenätherd. 4-Keto-2-Phenylimido-3-Phenyl-5-[2-Oxybenzyliden]tetrahydrothiazol. Sm. 160° (M. 24, 517 C. 1903 [2] 837).
- $C_{23}H_{16}O_3N_2Cl$  1) p-Chloridi[2-Naphtylamid] d. Oximidomalonsäure. Sm. 202°. K (Soc. 83, 42 C. 1903 [1] 442).
- $C_{23}H_{18}ON_2S$  1) 2-Phenylbenzylamido-4-Keto-5-Benzyliden-4,5-Dihydrothiazol (C. 1903 [1] 1258).
- $C_{23}H_{18}O_3N_4S$  1) α-Phenylhydrazon-α-[4-Sulfo-1-Naphtyl]azo-α-Phenylmethan. Na (C. 1903 [2] 427).
- $C_{23}H_{18}O_7N_2S_3$  1) 1-[4-Merkaptophenyl]azo-2-Oxynaphtalin-8-4-Methylphenyläther-3,6-Disulfonsäure (J. pr. [2] 68, 275 C. 1903 [2] 994).
- $C_{23}H_{21}O_2N_3S$  1) Äthyläther d. α-Benzoylimido-α-[β-Benzoyl-β-Phenylhydrazido]-α-Merkaptomethan. Sm. 170—171° (Am. 29, 79 C. 1903 [1] 523).
- $C_{23}H_{22}O_4N_2S$  2) Verbindung + 2H<sub>2</sub>O (aus Lophin u. Methylsulfat). Sm. 115 bis 117° u. Zers. (B. 35, 4141 C. 1903 [1] 296).
- $C_{23}H_{22}O_6N_2S$  1) Dioxytetramethylrosaminsulfonsäure + H<sub>2</sub>O (B. 36, 2927 C. 1903 [2] 1066; B. 37, 203 C. 1904 [1] 664).
- $C_{23}H_{22}N_3JS$  1) Äthyläther d. 5-Jod-3-Merkapto-1,5-Diphenyl-4-[2-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 245° (J. pr. [2] 67, 245 C. 1903 [1] 1264).
- 2) Äthyläther d. 5-Jod-3-Merkapto-1,5-Diphenyl-4-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 256° (J. pr. [2] 67, 245 C. 1903 [1] 1264).
- $C_{23}H_{23}ON_5S$  1) Verbindung (aus d. Chlorid C<sub>18</sub>H<sub>14</sub>N<sub>6</sub>OIS). Sm. 152° (J. pr. [2] 67, 254 C. 1903 [1] 1265).
- $C_{23}H_{28}O_2N_6S_2$  1) Dimethyläther d. Phenylamidothioformyl-di[2-Oxyphenyl]thiodicyandiamin. Sm. 210—211° (B. 36, 3325 C. 1903 [2] 1169).
- $C_{23}H_{29}O_3N_6S$  1) Dimethyläther d. Phenylamidoformyl-di[2-Oxyphenyl]thiodicyandiamin. Sm. 185° (B. 36, 3324 C. 1903 [2] 1169).
- $C_{23}H_{24}O_5N_4S_2$  1) Phenylhydrazid d. α-[2-Methylphenylthiosulfon]-β-Phenylhydrazonbuttersäure. Sm. 145—146° u. Zers. (J. pr. [2] 70, 383 C. 1904 [2] 1720).

- $C_{23}H_{24}O_3N_4S_2$  2) Phenylhydrazid d.  $\alpha$ -[4-Methylphenylthiosulfon]- $\beta$ -Phenylhydrazonbuttersäure. Sm. 163—164° (*J. pr.* [2] 70, 377 *C.* 1904 [2] 1719).
- $C_{23}H_{24}O_4N_2S$  \*1) 3,6-Di[Dimethylamido]-9-Phenylxanthen-9<sup>3</sup>-Sulfonsäure. Na (*B.* 37, 208 *C.* 1904 [1] 665).
- $C_{23}H_{24}O_4N_4S_2$  1) Phenylhydrazid d.  $\alpha$ -[4-Methoxyphenylthiosulfon]- $\beta$ -Phenylhydrazonbuttersäure. Sm. 135—136° u. Zers. (*J. pr.* [2] 70, 390 *C.* 1904 [2] 1721).
- $C_{23}H_{25}O_4N_3S$  1) Phenylamid d.  $\alpha$ -Phenylsulfon- $\alpha$ -[4-Oxy-5-Isopropyl-2-Methylphenyl]hydrazin- $\beta$ -Carbonsäure. Zers. bei 125—130° (*A.* 334, 195 *C.* 1904 [2] 835).
- $C_{23}H_{25}O_4N_4Cl$  \*1) 4-Chlor-1,3-Dinitrobenzol + Di[4-Dimethylamidophenyl]-methan. Sm. 73—74° (*J. pr.* [2] 68, 254 *C.* 1903 [2] 1064).
- $C_{23}H_{26}N_4Cl_2S_2$  1) Methylenäther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-2-Chlormethylat. Sm. 201° (*A.* 331, 205 *C.* 1904 [1] 1218).
- $C_{23}H_{26}N_4Br_2S_2$  1) Methylenäther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-2-Brommethylat. Sm. 176° (*A.* 331, 206 *C.* 1904 [1] 1218).
- $C_{23}H_{26}N_4J_2S_2$  1) Methylenäther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-2-Jodmethylat. Sm. 197° u. Zers. (*A.* 331, 205 *C.* 1904 [1] 1218).
- $C_{23}H_{27}O_8N_2Cl$  2) Verbindung (aus Chlordimethyläther u. Strychnin). 2 +  $PtCl_4$ , +  $AuCl_3$  (*A.* 334, 54 *C.* 1904 [2] 948).
- $C_{23}H_{28}O_4NJ$  1) Jodpropylat d. Papaverin (*B.* 37, 3812 *C.* 1904 [2] 1575).
- $C_{23}H_{28}O_4NJ$  2) Jodisopropylat d. Papaverin. Sm. 93—94° (*B.* 37, 3812 *C.* 1904 [2] 1575).
- $C_{23}H_{28}O_6NJ$  1) Jodmethylat d. Oxycodindiacetat. Zers. bei 248—255° (*B.* 36, 3070 *C.* 1903 [2] 953).

## — 23 V —

- $C_{23}H_{17}O_8N_4ClS$  1)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Sulfo-1-Naphtyl]azo- $\alpha$ -[2-Chlorphenyl]-methan. K (*C.* 1903 [2] 427).
- $C_{23}H_{26}O_2N_2Br_2J$  1) Jodäthylat d. isom. Dibromstrychnin. Sm. 251° (*Bl.* [3] 31, 389 *C.* 1904 [1] 1280).
- $C_{23}H_{26}O_2N_2BrJ$  1) Jodäthylat d. isom. Bromstrychnin. Sm. 272° (*Bl.* [3] 31, 387 *C.* 1904 [1] 1279).

**C<sub>24</sub>-Gruppe.**

- $C_{24}H_{18}$  \*2) 1,3,5-Triphenylbenzol (*M.* 25, 975 *C.* 1904 [2] 1599).
- $C_{24}H_{20}$  \*3) 4,4'-Diphenylbiphenyl. Sm. 320° (*A.* 332, 51 *C.* 1904 [2] 40).
- $C_{24}H_{20}$  1) 2-Methyl-1,3,4-Triphenyl-R-Penten. Sm. 162—163° (*Soc.* 83, 372 *C.* 1903 [1] 569).
- $C_{24}H_{24}$  C 92,3 — H 7,7 — M. G. 312.
- $C_{24}H_{24}$  1) 1-Methyl-2,3,5-Triphenyl-R-Pentamethylen. Sm. 121—122° (*Soc.* 83, 373 *C.* 1903 [1] 569).
- $C_{24}H_{24}$  2) isom. 1-Methyl-2,3,5-Triphenyl-R-Pentamethylen. Sd. 260—262° (*Soc.* 83, 373 *C.* 1903 [1] 569).
- $C_{24}H_{46}$  C 86,2 — H 13,8 — M. G. 334.
- $C_{24}H_{46}$  1) Kohlenwasserstoff (aus Petroleum) (*C.* 1904 [1] 409).

## — 24 II —

- $C_{24}H_{12}S$  1) Dinaphtylenthiofen. Sm. 278° (275—276°). Pikrat (*B.* 36, 966 *C.* 1903 [1] 1087; *B.* 36, 1584 *C.* 1903 [2] 46).
- $C_{24}H_{14}O_4$  C 78,7 — H 3,8 — O 17,5 — M. G. 366.
- $C_{24}H_{15}N$  1) Binaphtoketocumaran. Sm. 218° u. Zers. (*Soc.* 83, 1130 *C.* 1903 [2] 1060).
- $C_{24}H_{15}N$  C 90,9 — H 4,7 — N 4,4 — M. G. 317.
- $C_{24}H_{15}N$  1) 9,10-Phenanthro-1',2'-Naphtocarbazol. Sm. 220° (*Soc.* 83, 275 *C.* 1903 [1] 588, 883).
- $C_{24}H_{15}N$  2) 9,10-Phenanthro-2',1'-Naphtocarbazol. Sm. 225,5° (*Soc.* 83, 276 *C.* 1903 [1] 589, 883).

- $C_{24}H_{16}O$  C 90,0 — H 5,0 — O 5,0 — M. G. 320.  
 1) 1,4-Diphenyl- $\alpha$ -Naphtofuran. Sm. 120—121° (B. 36, 2435 C. 1903 [2] 503).
- $C_{24}H_{16}O_2$  3) Lakton d. Diphenyl-2-Oxy-1-Naphtylelessigsäure. Sm. 183° (B. 37, 672 C. 1904 [1] 953).  
 4) Lakton d. Diphenyl-1-Oxy-2-Naphtylelessigsäure. Sm. 145—190° u. Zers. (B. 37, 671 C. 1904 [1] 953).
- $C_{24}H_{16}O_3$  \*2) Anhydrid d.  $\alpha\alpha\delta$ -Triphenyl- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm. 218° (B. 37, 2659 C. 1904 [2] 523).
- $C_{24}H_{16}O_5$  C 75,0 — H 4,2 — O 20,8 — M. G. 384.  
 1) 7-Oxy-3-Benzoyl-4-Methylen-2-Phenyl-1,4-Benzpyran-2<sup>3</sup>-Carbonsäure. Sm. 245° (B. 37, 1968 C. 1904 [2] 231).
- $C_{24}H_{16}O_6$  2) 5,7-Dioxy-3-Benzoyl-4-Methylen-2-Phenyl-1,4-Benzpyran-2<sup>3</sup>-Carbonsäure. Sm. 263° u. Zers. (B. 37, 1970 C. 1904 [2] 232).  
 3) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Benzoyl- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]-propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 179° (A. 333, 257 C. 1904 [2] 1391).  
 4) isom. Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Benzoyl- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 172° (A. 333, 257 C. 1904 [2] 1391).
- $C_{24}H_{16}O_8$  2)  $\alpha$ -[3,4-Dibenzoxylphenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sm. 200—201° u. Zers. (B. 36, 2935 C. 1903 [2] 888).
- $C_{24}H_{18}O_2$  7)  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha\beta$ -Diphenyl- $\alpha$ -[1-Naphtyl]äthan ( $\alpha$ -Naphtylbenzoïn). Sm. 132—133° (B. 37, 2760 C. 1904 [2] 707).  
 8) 3-Benzoylmethyl-2,5-Diphenylfuran. Sm. 118° (B. 36, 2433 C. 1903 [2] 503).  
 9) Benzoat d. 2-Oxy-1-Benzylnaphtalin. Sm. 95—97° (G. 33 [2] 491 C. 1904 [1] 656).  
 10) Benzoat d. 4-Oxy-1-Benzylnaphtalin. Sm. 102—103° (G. 33 [2] 474 C. 1904 [1] 655).
- $C_{24}H_{18}O_3$  4) cis-1,2,3-Tribenzoyl-R-Trimethylen. Sm. 215° (B. 36, 2429 C. 1903 [2] 502).  
 5) trans-1,2,3-Tribenzoyl-R-Trimethylen. Sm. 292° (B. 36, 2431 C. 1903 [2] 502).  
 6) Lakton d.  $\delta$ -Oxy- $\delta$ -[4-Methoxyl]- $\alpha\gamma$ -Diphenyl- $\alpha\gamma$ -Butadien- $\beta$ -Carbonsäure. Sm. 195° (B. 36, 2525 C. 1903 [2] 575; A. 333, 275 C. 1904 [2] 1392).  
 7) 2-Oxybenzoat d. 4-Oxy-1-Benzylnaphtalin. Sm. 85—86° (G. 33 [2] 476 C. 1904 [1] 655).
- $C_{24}H_{18}O_4$  \*1)  $\alpha\alpha\delta$ -Triphenyl- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure +  $4\frac{1}{2}H_2O$ . Sm. 218 bis 219° u. Zers. (wasserfrei). +  $2CHCl_3$ ,  $Na_2$  +  $6\frac{1}{2}H_2O$ ,  $Ca$  +  $4H_2O$ ,  $Ba$  +  $4H_2O$ , Piperidinsalz (B. 37, 2657 C. 1904 [2] 522).  
 \*6) Chinhydron (aus 2-Phenyl-1,4-Benzochinon). Sm. 177° (B. 37, 880 C. 1904 [1] 1143).  
 10) Di[1-Naphtylester] d. Bernsteinsäure. Sm. 163° (B. 35, 4081 C. 1903 [1] 74).  
 11) Di[2-Naphtylester] d. Bernsteinsäure. Sm. 155° (B. 35, 4082 C. 1903 [1] 74).
- $C_{24}H_{18}O_5$  \*6) Verbindung (aus 1,3-Dioxybenzol) (B. 36, 3051 C. 1903 [2] 1008).  
 7)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Benzoyl- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]-propan-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 170° (A. 333, 269 C. 1904 [2] 1392).
- $C_{24}H_{18}O_9$  4) Tetraacetat d. Tetraoxy- $\beta\beta$ -Phenylennaphtylenoxyd (T. d. Tetraoxybrasan). Sm. 208—209° (B. 36, 2197 C. 1903 [2] 381).
- $C_{24}H_{18}N_2$  \*1) 4,4'-Diphenylazobenzol. Sm. 250° (C. 1904 [1] 1491).
- $C_{24}H_{18}N_4$  \*2) 4,4'-Di[Phenylazo]biphenyl. Sm. 233,5° (A. 332, 81 C. 1904 [2] 43).
- $C_{24}H_{19}N$  2) 3-Methyl-2,4,6-Triphenylpyridin. Sm. 141—142°.  $HCl$ , Pikrat (Soc. 83, 363 C. 1903 [1] 577, 1129).
- $C_{24}H_{19}N_3$  3) 3'-Amido-2'-Methyl-9-[4-Amidophenyl]-1,2-Naphtakridin. Sm. 318°.  $2HCl$ ,  $HNO_3$  (C. 1903 [1] 884).
- $C_{24}H_{20}O$  3) 4-Keto-2,3,5-Triphenyl-1,2,3,4-Tetrahydrobenzol (Triphenyleyklohexenon). Sm. 181—191° u. Zers. (B. 37, 1146 C. 1904 [1] 1266).  
 4) isom. Triphenyleyklohexenon. Sm. 136° (B. 37, 1147 C. 1904 [1] 1266).

- $C_{24}H_{20}O_2$  4)  $\alpha$ -Dioxy- $\alpha$ - $\beta$ -Diphenyl- $\alpha$ -[1-Naphtyl]äthan. Sm. 198° (B. 37, 2764 C. 1904 [2] 708).
- 5) Methyläther d. 7-Oxy-5-Methyl-2-Phenyl-4-Benzyliden-1,4-Benzpyran. Sm. 141—145° (B. 35, 1809 C. 1902 [2] 118). — \*III, 548.
- $C_{24}H_{20}O_3$  11) Äethyläther d. 6-Oxy-2-Phenyl-3-Benzyliden-2,3-Dihydro-1,4-Benzpyron. Sm. 106° (B. 37, 3170 C. 1904 [2] 1059).
- $C_{24}H_{20}O_5$  5) Diäthyläther d. Hydrochinonphtalein. Sm. 164° (B. 36, 2960 C. 1903 [2] 1006).
- $C_{24}H_{20}O_6$  \*5) Tribenzat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 71,5—72° (76°) (B. 36, 1573 C. 1903 [2] 225; B. 36, 4341 C. 1904 [1] 434).
- 8) Dibenzat d. 3,6-Dioxy-2,5-Diäthyl-1,4-Benzochinon. Sm. 201° (B. 37, 2386 C. 1904 [2] 307).
- $C_{24}H_{20}O_7$  5) Tetramethyläther d. Phloroglucinphtalein (B. 36, 1075 C. 1903 [1] 1181).
- $C_{24}H_{20}O_8$  \*3) Tetraacetat d. Verb.  $C_{10}H_{12}O_4$ . Sm. 212—214° (M. 25, 887 C. 1904 [2] 1313).
- $C_{24}H_{20}O_{11}$  2) Tetraacetat d. Cocacetin. Sm. 180° (J. pr. [2] 66, 410 C. 1903 [1] 527).
- $C_{24}H_{20}N_4$  5) Base (aus Anilinschwarz) (C. 1903 [2] 1297).
- $C_{24}H_{20}Pb$  \*1) Bleitetraphenyl. Sm. 222—224° (B. 37, 1126 C. 1904 [1] 1257).
- $C_{24}H_{20}Sn$  \*1) Zinntetraphenyl. Sm. 220° (B. 37, 321 C. 1904 [1] 637; C. 1904 [1] 353).
- $C_{24}H_{21}N_3$  \*9) 2,4,6-Tri[4-Methylphenyl]-1,3,5-Triazin. Sm. 278° (Soc. 85, 263 C. 1904 [1] 1005).
- $C_{24}H_{22}O$  2)  $\gamma$ -Keto- $\beta\gamma$ -Diphenyl- $\alpha$ -[4-Isopropylphenyl]propen. Sm. 103—104° (B. 35, 3968 C. 1903 [1] 31).
- 3) isom.  $\gamma$ -Keto- $\beta\gamma$ -Diphenyl- $\alpha$ -[4-Isopropylphenyl]propen. Sm. 65° (B. 35, 3968 C. 1903 [1] 31).
- $C_{24}H_{22}O_2$  4)  $\alpha\gamma$ -Dibenzoyl- $\beta$ -Phenylbutan. Sm. 103,5—104,5° (Soc. 83, 362 C. 1903 [1] 577, 1129).
- $C_{24}H_{22}O_3$  2) Acetat d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\beta\delta$ -Triphenylbutan. Sm. 109—111° (M. 24, 723 C. 1904 [1] 167).
- $C_{24}H_{22}O_4$  12) 4-Acetoxy-2,5-Dimethyltriphenylelessigsäure. Sm. 230—231° u. Zers. Na (B. 37, 667 C. 1904 [1] 953).
- 13) cis- $\alpha\alpha\delta$ -Triphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 175° (B. 37, 2669 C. 1904 [2] 524).
- 14) trans- $\alpha\alpha\delta$ -Triphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 205° (B. 37, 2669 C. 1904 [2] 524).
- $C_{24}H_{22}O_6$  2) Verbindung (aus Aenaphtenchinon u. Acetessigsäureäthylester). Sm. 274—275° (G. 32 [1] 367 C. 1903 [1] 639).
- $C_{24}H_{22}O_9$  \*1) Tetraacetat d. Brasilin. Sm. 143—145° (B. 36, 3952 C. 1904 [1] 170).
- 2) Diacetat d. Hexaoxybrasantetramethyläther. Sm. 234° (B. 36, 2205 C. 1903 [2] 382).
- $C_{24}H_{22}N_2$  10) 4-Phenylhydrazon-3,5-Diphenyl-1,2,3,4-Tetrahydrobenzol. Sm. 181° (B. 36, 2134 C. 1903 [2] 366).
- $C_{24}H_{22}N_3$  2) 3,5-Di[4-Methylphenyl]-1-[2,4-Dimethylphenyl]-1,2,4-Triazol. Sm. 168° (J. pr. [2] 67, 492 C. 1903 [2] 251).
- $C_{24}H_{24}O$  \*1) 4-Keto-1,3-Dibenzyliden-5-Isopropyl-2-Methyl-1,2,3,4-Tetrahydrobenzol (Dibenzylidenmenthenon) (C. 1903 [2] 1373).
- $C_{24}H_{24}O_2$  6) 2,3-Dioxy-1-Methyl-2,3,5-Triphenyl-R-Pentamethylen. Sm. 68 bis 80° (Soc. 83, 372 C. 1903 [1] 569).
- $C_{24}H_{24}O_3$  2) 4-Oxy-2-Methyl-5-Isopropyltriphenylelessigsäure. Sm. 197—198° (B. 37, 668 C. 1904 [1] 953).
- 3) 4-Oxy-3-Methyl-6-Isopropyltriphenylelessigsäure. Sm. 241° u. Zers. Ag (B. 37, 670 C. 1904 [1] 953).
- $C_{24}H_{24}O_{12}$  C 57,1 — H 4,8 — O 38,1 — M. G. 504.
- 1) Verbindung (aus Gallacetophenon). K (Soc. 83, 131 C. 1903 [1] 89, 466).
- $C_{24}H_{26}O$  \*3) Äethyläther d.  $\alpha$ -Oxytri[4-Methylphenyl]methan. Sm. 114° (B. 37, 3157 C. 1904 [2] 1048).
- $C_{24}H_{26}O_2$  2) Benzyläther d.  $\alpha$ -Oxybenzylidencampher. Sm. 94—95° (Soc. 83, 109 C. 1903 [1] 459).
- $C_{24}H_{26}O_5$  2) Diäthylester d.  $\gamma$ -Benzoylmethyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta\delta$ -Dicarbonsäure. Sm. 92,5—93° (C. 1903 [2] 944).

- $C_{24}H_{26}O_9$  2) Evernursäure. Sm. 191—192° u. Zers.  $K + 2H_2O$  (*J. pr.* [2] 63, 534; *J. pr.* [2] 68, 20 *C.* 1903 [2] 511). — \*II, 1235.
- $C_{24}H_{26}O_{10}$  4) Tetraäthylester d. 1,4-Naphtochinon-2,3-Dimalonsäure. Sm. 98° (*B.* 33, 577). — \*II, 1230.
- $C_{24}H_{27}N_3$  6) 1,3,5-Tribenzylhexahydro-1,3,5-Triazin. Sd. 230—240° (*D.R.P.* 139394 *C.* 1903 [1] 678).
- $C_{24}H_{28}O_4$  4) Äthylester d. 1-Benzoylsantonigen Säure. Sm. 75° (*G.* 25 [1] 515). — \*II, 978.
- $C_{24}H_{28}O_7$  2) Dihydroflavaspidsäurexanthen. Sm. 257—259° u. Zers. (*A.* 329, 312, 332 *C.* 1904 [1] 798).
- $C_{24}H_{28}O_8$  \*2)  $\beta$ -Flavaspidsäure (Polystichocitrin) (*C.* 1898 [2] 1103; *A.* 329, 322 *Anm. C.* 1904 [1] 799; *A.* 329, 310 *C.* 1904 [1] 798).
- 3)  $\alpha$ -Flavaspidsäure. Sm. 92° (*A.* 329, 310 *C.* 1904 [1] 798). — \*III, 457.
- $C_{24}H_{29}N_5$  \*2) 6'-Amido-4<sup>2</sup>,4<sup>3</sup>-Di[Dimethylamido]-3'-Methyltriphenylmethan. Sm. 187,5° (*B.* 36, 2782 *C.* 1903 [2] 881).
- $C_{24}H_{30}O_4$  3) Di[2-Methyl-5-Isopropylphenylester] d. Bernsteinsäure. Sm. 37°; Sd. 264—268° (*B.* 35, 4081 *C.* 1903 [1] 74).
- 4) Di[3-Methyl-6-Isopropylphenylester] d. Bernsteinsäure. Sm. 63°; Sd. oberh. 360° (*B.* 35, 4081 *C.* 1903 [1] 74).
- $C_{24}H_{30}O_7$  2) Pikroglobularin. Sm. 100° u. Zers. (*Ar.* 241, 295 *C.* 1903 [2] 515).
- $C_{24}H_{30}O_{16}$  4) Anhydrid (aus d. Säure  $C_{12}H_{16}O_8$ ).  $Ca_3 + 2H_2O$ ,  $Ag_3$  (*M.* 24, 186 *C.* 1903 [2] 20).
- $C_{24}H_{34}O_8$  4) Isobiliansäure +  $H_2O$ . Sm. 244—245° (*M.* 24, 53 *C.* 1903 [1] 765).
- $C_{24}H_{36}O_2$  3) Verbindung (aus *Asclepias syriaca* L.). Sm. 82—83° (*J. pr.* [2] 68, 409 *C.* 1904 [1] 105).
- $C_{24}H_{36}O_4$  \*1) Dehydrocholeinsäure. Sm. 183—184° (*M.* 24, 29 *C.* 1903 [1] 764).
- $C_{24}H_{36}O_7$  \*2) Cholansäure. Sm. 294—295° (*M.* 24, 30 *C.* 1903 [1] 764).
- $C_{24}H_{38}O$  C 84,2 — H 11,1 — O 4,7 — *M. G.* 342.
- 1) Altol. Sm. 162° (*B.* 37, 4110 *C.* 1904 [2] 1656).
- $C_{24}H_{38}O_4$  4) i-Dibornylester d. Bernsteinsäure. Sm. 82° (*C. r.* 132, 1574). — \*III, 339.
- $C_{24}H_{38}O_9$  C 61,3 — H 8,1 — O 30,6 — *M. G.* 470.
- 1) Dioscin +  $3H_2O$ . Sm. 247—250° (*C.* 1904 [2] 118).
- $C_{24}H_{38}O_{12}$  C 55,6 — H 7,3 — O 37,1 — *M. G.* 518.
- 1) Hexaäthylester d. Hexan- $\alpha\gamma\gamma\delta\delta\zeta$ -Hexacarbonsäure (*Soc.* 85, 614 *C.* 1904 [1] 1254, 1553).
- $C_{24}H_{40}O$  4) Verbindung (aus *Asclepias syriaca* L.). Sm. 108—110° (*J. pr.* [2] 68, 399 *C.* 1904 [1] 105).
- 5) Verbindung (aus *Asclepias syriaca* L.). Sm. 145—146° (*J. pr.* [2] 68, 411 *C.* 1904 [1] 105).
- $C_{24}H_{40}O_2$  7) Verbindung (aus *Asclepias syriaca* L.) (*J. pr.* [2] 68, 405 *C.* 1904 [1] 105).
- $C_{24}H_{40}O_4$  \*1) Desoxycholsäure. Sm. 172—173°.  $Ba_2 +$  Essigsäure (*M.* 24, 23 *C.* 1903 [1] 764).
- $C_{24}H_{40}O_6$  \*1) Cholsäure. +  $C_2H_6O$ . Sm. 197° (*C.* 1903 [2] 727; *M.* 24, 32 *C.* 1903 [1] 764).
- $C_{24}H_{40}O_{21}$  C 43,4 — H 6,0 — O 50,6 — *M. G.* 664.
- 1) Oxycellulose (*C. r.* 136, 898 *C.* 1903 [1] 1081).
- $C_{24}H_{42}O_{11}$  \*5) Manneotetrose (*C. r.* 136, 1569 *C.* 1903 [2] 347).
- $C_{24}H_{44}O_2$  C 79,1 — H 12,1 — O 8,8 — *M. G.* 364.
- 1) Äthylester d. Behenolsäure. Sm. 15—16° (*B.* 36, 3602 *C.* 1903 [2] 1314).
- $C_{24}H_{44}O_4$  2) Acetylphellonsäure. Sm. 80° (*M.* 25, 283 *C.* 1904 [1] 1573).
- 3) Propylester d. Propionylricinolsäure. Sd. 310—320°<sub>446</sub> (*B.* 36, 788 *C.* 1903 [1] 824).
- 4) Isobutylester d. Acetylricinolsäure. Sd. 255—260°<sub>18</sub> (*B.* 36, 786 *C.* 1903 [1] 824).
- $C_{24}H_{44}N_2$  3) 1,3-Di[Diisobutylamidomethyl]benzol. Fl. ( $2HCl$ ,  $HgCl_2$ ), ( $2HCl$ ,  $PtCl_4$ ), 2 Pikrat (*B.* 36, 1675 *C.* 1903 [2] 29).
- $C_{24}H_{46}O_3$  3) Äthylester d. Phellonsäure. Sm. 66° (*M.* 25, 294 *C.* 1904 [1] 1573).
- 4) Äthylester d. Isophellonsäure. Sm. 53° (*M.* 25, 294 *C.* 1904 [1] 1573).

- $C_{24}H_{47}N_8$  C 76,4 — H 12,5 — N 11,1 — M. G. 377.  
 1) 2,5-Diundekyl-1,3,4-Triazol. Sm. 89° (*J. pr.* [2] 69, 505 *C.* 1904 [2] 601).  
 $C_{24}H_{48}N_4$  C 73,4 — H 12,2 — N 14,3 — M. G. 392.  
 1) 3,6-Diundekyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 142° (*J. pr.* [2] 69, 505 *C.* 1904 [2] 601).

## — 24 III —

- $C_{24}H_{10}Br_2S$  1)  $\alpha\alpha$ -Dibromdinaphtylenthiofen. Sm. 362—363° (*B.* 36, 3770 *C.* 1903 [2] 1445).  
 $C_{24}H_{11}BrS$  1)  $\alpha$ -Bromdinaphtylenthiofen. Sm. 202° (*B.* 36, 3769 *C.* 1903 [2] 1445).  
 $C_{24}H_{12}O_8Cl_4$  1) Verbindung (aus 3,3'-Dichlor-4,4'-Diamidobiphenyl). + Essigsäureanhydrid (*Soe.* 83, 690 *C.* 1903 [2] 38).  
 $C_{24}H_{12}O_{12}B$  1) Gem. Anhydrid d. Benzol-1,2-Dicarbonensäure u. Borsäure. Sm. 165° (*B.* 36, 2224 *C.* 1903 [2] 421).  
 $C_{24}H_{14}O_2N_2$  \*1) 1-Naphtalinindigo (D.R.P. 153418 *C.* 1904 [2] 679).  
 \*2) 2-Naphtalinindigo (D.R.P. 153418 *C.* 1904 [2] 679).  
 $C_{24}H_{14}O_8N_2$  C 76,2 — H 3,7 — O 12,7 — N 7,4 — M. G. 378.  
 1) 1-[2-Oxy-1-Naphtylazo]-9,10-Anthrachinon (*B.* 37, 4186 *C.* 1904 [2] 1742).  
 2) 2-[1-Oxy-2-Naphtylazo]-9,10-Anthrachinon. Sm. 262—264° (*C.* 1904 [1] 289).  
 3) 2-[4-Oxy-1-Naphtylazo]-9,10-Anthrachinon. Sm. 278° (*C.* 1904 [1] 289).  
 $C_{24}H_{14}O_4S_2$  1) Verbindung (aus Thiophenochinon). Sm. 96° (*A.* 336, 131 *C.* 1904 [2] 1298).  
 $C_{24}H_{15}O_2Br$  1) Lakton d. *p*-Bromdiphenyl-2-Oxy-1-Naphtylelessigsäure. Sm. 162 bis 164° (*B.* 37, 673 *C.* 1904 [1] 954).  
 2) Lakton d. *p*-Bromdiphenyl-1-Oxy-2-Naphtylelessigsäure. Sm. 205° (*B.* 37, 671 *C.* 1904 [1] 953).  
 $C_{24}H_{15}O_4N$  C 75,6 — H 3,9 — O 16,8 — N 3,7 — M. G. 381.  
 1) Lakton d. *p*-Nitrodiphenyl-1-Oxy-2-Naphtylelessigsäure. Sm. 241° (*B.* 37, 672 *C.* 1904 [1] 953).  
 $C_{24}H_{16}ON_2$  2) 2-Oxy-1-[9-Phenanthrylazo]naphtalin. Sm. 240° (*B.* 36, 2518 *C.* 1903 [2] 507).  
 $C_{24}H_{16}O_2S_3$  1) Triphenyläther d. 2,3,5-Trimerkapto-1,4-Benzochinon. Sm. 169° (*A.* 336, 142 *C.* 1904 [2] 1299).  
 $C_{24}H_{16}O_7Cl_4$  1) Tetramethyläther d. Tetrachlordioxyfluorescein. Sm. 175° (*B.* 36, 1079 *C.* 1903 [1] 1182).  
 $C_{24}H_{17}ON_3$  8) Monophenylhydrazon d. Chinophtalon. Sm. 206° (*B.* 37, 3019 *C.* 1904 [2] 1410).  
 9) Verbindung (aus Chinolylacetophenon-2-Carbonsäure). Sm. 102—105° (*B.* 37, 3012 *C.* 1904 [2] 1409).  
 $C_{24}H_{17}O_2N_3$  8) Indophenol (aus 4,4'-Di[4-Oxyphenylamido]diphenylamin) (D. R. P. 153130 *C.* 1904 [2] 799).  
 $C_{24}H_{17}O_8N_3$  C 72,9 — H 4,3 — O 12,1 — N 10,6 — M. G. 395.  
 1) Phenylamid d. 4-Benzoxyl-1-Naphtylazoameisensäure. Sm. 230° u. Zers. (*A.* 334, 198 *C.* 1904 [2] 835).  
 $C_{24}H_{17}O_4N_3$  2) 4-Phtalidyl-3-Methyl-5-Phenyl-1-[4-Nitrophenyl]pyrazol. Sm. 169° (*B.* 37, 586 *C.* 1904 [1] 940).  
 $C_{24}H_{17}O_5N$  C 72,2 — H 4,3 — O 20,1 — N 3,5 — M. G. 399.  
 1) Dimethylenäther d.  $\gamma$ -Keto- $\gamma$ -[4-(3,4-Dioxybenzyliden)amido-phenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 189° (*B.* 37, 393 *C.* 1904 [1] 657).  
 $C_{24}H_{17}O_{12}N_3$  C 53,4 — H 3,1 — O 35,6 — N 7,8 — M. G. 539.  
 1) Tri[4-Nitrobenzoat] d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 192° (*A.* 335, 284 *C.* 1904 [2] 1285).  
 $C_{24}H_{17}N_3S_3$  1) Farbstoff (aus Phenazthioniumchlorid u. 2,2'-Diamidodiphenyldisulfid) (*C.* 1904 [2] 1175).  
 $C_{24}H_{17}N_4Br$  1) 3-Brom-7,8-Di[Phenylhydrazon]naphtacen. Sm. 134° (*A.* 327, 89 *C.* 1903 [1] 1228).

- $C_{24}H_{18}ON_2$  8) 4,5-Benzoylmethylen-3,6-Diphenyl-4,5-Dihydro-1,2-Diazin. Sm. 235° (*B.* 36, 2432 *C.* 1903 [2] 503).
- $C_{24}H_{18}ON_4$  4) 6-Benzoyl-3-Methyl-1,4-Diphenylbipyrazol. Sm. 166° (*B.* 36, 528 *C.* 1903 [1] 642).
- $C_{24}H_{18}O_2N_2$  16) 1,2-Di[Benzoylamido]naphtalin. Sm. 130° (*Soc.* 83, 1192 *C.* 1903 [2] 1444).
- $C_{24}H_{18}O_2N_4$  \*1) 4,4'-Di[4-Oxyphenylazo]biphenyl (*B.* 36, 2973 *C.* 1903 [2] 1031).
- $C_{24}H_{18}O_2S_8$  1) 2,3,5-Triphenyläther d. 2,3,5-Trimerkapto-1,4-Dioxybenzol. Sm. 111,5—112,5° (*A.* 336, 140 *C.* 1904 [2] 1299).
- $C_{24}H_{19}ON_3$  \*1) 2,5-Di[Phenylamido]-4-Phenylimido-1-Keto-1,4-Dihydrobenzol. Sm. 202—203° (*Am.* 30, 534 *C.* 1904 [1] 366).
- $C_{24}H_{19}O_2N$  7) 2-Oxy-1-[ $\alpha$ -2-Oxybenzylidenamidobenzyl]naphtalin. Sm. 174° (*G.* 33 [1] 32 *C.* 1903 [1] 926).
- 8) 2-Oxy-1-[ $\alpha$ -Benzoylamidobenzyl]naphtalin. Sm. 225° (*G.* 33 [1] 8 *C.* 1903 [1] 925).
- $C_{24}H_{19}O_3N$  3) 1,3-Di[2-Oxyphenyl]-1,3-Dihydro-4,2- $\beta$ -Naptisoxazin. Sm. 162° (*G.* 33 [1] 15 *C.* 1903 [1] 925).
- $C_{24}H_{19}O_4N_8$  2) 3-Methyl-4-Benzyl-5-Phenyl-1-[4-Nitrophenyl]pyrazol-4<sup>2</sup>-Carbonsäure. Sm. 219° (*B.* 37, 587 *C.* 1904 [1] 940).
- $C_{24}H_{19}O_5N$  3) Diacetat d. 1-Keto-2,3-Di[4-Oxyphenyl]-1,3-Dihydroisocindol. Sm. 205—208° (*M.* 17, 437). — \*II, 1156.
- $C_{24}H_{19}O_5N_8$  C 67,1 — H 4,4 — O 18,7 — N 9,8 — M. G. 429.
- 1) 4-Nitro-1,2,3-Trioxybenzol + 2 Molec. Chinolin. Sm. 74° (*B.* 37, 116 *C.* 1904 [1] 585).
- $C_{24}H_{20}ON_2$  13) 5-Keto-3-Methyl-4-Benzyliden-1-Diphenylmethyl-4,5-Dihydro-pyrazol. Sm. 176° (*J. pr.* [2] 67, 175 *C.* 1903 [1] 874).
- $C_{24}H_{20}O_2N_4$  8) Aethylester d. 4-Phenylazo-1,5-Diphenylpyrazol-3-Carbonsäure. Sm. 148—149° (*B.* 37, 2205 *C.* 1904 [2] 323).
- $C_{24}H_{20}O_4N_2$  \*2) 1-Naphtylamid d. d-Weinsäure. Sm. 213—214° (*Soc.* 83, 1359 *C.* 1904 [1] 84).
- \*3) 2-Naphtylamid d. d-Weinsäure. Sm. 279° (*Soc.* 83, 1359 *C.* 1904 [1] 84).
- 5) Dimethyläther d. 4,4'-Di[Furylamido]-3,3'-Dioxybiphenyl. Sm. 181—182° (*B.* 30, 2015). — \*III, 518.
- $C_{24}H_{20}O_4Si$  \*1) Tetraphenylkieselsäure (D.R.P. 140102 *C.* 1903 [1] 799).
- $C_{24}H_{21}ON$  7)  $\gamma$ -Keto- $\gamma$ -[4-p-Methylbenzylidenamidophenyl]- $\alpha$ -[4-Methylphenyl]-propen. Sm. 188° (*B.* 37, 393 *C.* 1904 [1] 657).
- $C_{24}H_{21}ON_5$  7) Cinnamylidenhydrazid d. 6-Cinnamylidenhydrazidopyridin-3-Carbonsäure. Sm. 265° (*B.* 36, 1113 *C.* 1903 [1] 1184).
- $C_{24}H_{21}O_2N_3$  \*3) 4,4'-Di[4-Oxyphenylamido]diphenylamin. Sm. 208° (D.R.P. 153130 *C.* 1904 [2] 799).
- $C_{24}H_{21}O_3N$  4) Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[4-(4-Oxybenzyliden)amidophenyl]- $\alpha$ -[4-Oxyphenyl]propen. Sm. 191° (*B.* 37, 394 *C.* 1904 [1] 657).
- $C_{24}H_{21}O_3N_8$  7) Benzoyl- $\gamma$ -Phenylsemicarbazon- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Buten. Sm. 204 bis 205° (*B.* 37, 3185 *C.* 1904 [2] 991).
- 8) Trimethyläther d. 2,4,6-Tri[4-Oxyphenyl]-1,3,5-Triazin. Sm. 217° (*Soc.* 85, 264 *C.* 1904 [1] 1005).
- $C_{24}H_{21}O_4N$  2) Diäthylrhodol (D.R.P. 116415). — \*III, 578.
- $C_{24}H_{21}O_4N_8$  C 69,4 — H 5,1 — O 15,4 — N 10,1 — M. G. 415.
- 1) Di[Methylphenylamid] d. Benzoximidomalonsäure. Sm. 157—158° (*Soc.* 83, 43 *C.* 1903 [1] 443).
- $C_{24}H_{22}ON_2$  4) N-Butyl- $\alpha'$ -Phenylpyrophtalin. Sm. 168°. (2HCl, PtCl<sub>4</sub>) (*B.* 36, 3923 *C.* 1904 [1] 98).
- $C_{24}H_{22}ON_4$  3) 5-Keto-4-[4-Methylphenyl]hydrazon-3-Methyl-1-Diphenylmethyl-4,5-Dihdropyrazol. Sm. 162—163° (*J. pr.* [2] 67, 175 *C.* 1903 [1] 874).
- $C_{24}H_{22}O_2N_2$  9)  $\gamma$ -[ $\alpha$ -Imidobenzyl]amido- $\gamma$ -Oxy- $\beta$ -Acetyl- $\alpha\gamma$ -Diphenylpropen. Sm. 132° (*Soc.* 83, 1376 *C.* 1904 [1] 164, 450).
- $C_{24}H_{22}O_3N_2$  5) s-Tetramethylrhodamin (D.R.P. 44002, 56293, 116415). — \*III, 575.
- $C_{24}H_{22}O_5S$  1)  $\gamma$ -[4-Methylphenyl]sulfon- $\epsilon$ -Keto- $\alpha\epsilon$ -Diphenyl- $\alpha$ -Penten. Sm. 145° (*Am.* 31, 184 *C.* 1904 [1] 877).
- 2)  $\epsilon$ -[4-Methylphenyl]sulfon- $\gamma$ -Keto- $\alpha\epsilon$ -Diphenyl- $\alpha$ -Penten. Sm. 189° (*Am.* 31, 180 *C.* 1904 [1] 876). — \*III, 186.
- $C_{24}H_{22}O_4N_2$  5) Methylenäther d. 2,6-Di[Benzoylamido]-3,4-Dioxy-1-Propylbenzol. Sm. 248° (*Ar.* 242, 91 *C.* 1904 [1] 1007).

- $C_{24}H_{22}O_4S_2$  2) 1,4-Diacetat d. 2,5-Dimerkapto-1,4-Dioxybenzol-2,5-Dibenzyl-äther. Sm. 203—205° (A. 336, 154 C. 1904 [2] 1300).
- $C_{24}H_{22}O_6N_2$  4) d-Urninsäureoximanilid. Sm. 222—230° (A. 310, 259). — \*II, 1204.  
C 54,8 — H 4,2 — O 30,4 — N 10,6 — M. G. 526.
- $C_{24}H_{22}O_{10}N_4$  1) 4,4-Biphenyldihydrazon d. Oxalessigsäuredimethylester (Bl. [3] 81, 89 C. 1904 [1] 580).
- $C_{24}H_{20}OCl$  1)  $\gamma$ -Chlor- $\alpha$ -Keto- $\alpha\beta$ -Diphenyl- $\gamma$ -[4-Methylphenyl]propan. Sm. 142 bis 143° (B. 35, 3967 C. 1903 [1] 31).
- $C_{24}H_{20}O_8N_5$  3)  $\beta$ -Methyl- $\alpha$ -Phenylhydrazid d.  $\alpha$ -Benzoximido- $\beta$ -Phenylhydrazon-buttersäure. Sm. 179° (A. 328, 70 C. 1903 [2] 249).
- $C_{24}H_{20}O_4N_3$  3) Lakton d.  $\alpha$ -Oxy-3'-Nitro-4',4'-Di[Dimethylamido]triphenylmethan-2'-Carbonsäure. Sm. 175° (C. r. 132, 748). — \*II, 1020.  
C 66,5 — H 5,3 — O 18,5 — N 9,7 — M. G. 433.
- $C_{24}H_{20}O_5N_3$  1) Phenylhydrazon d. Aldehyd  $C_{18}H_{17}O_6N$  (aus Bebeerin). Sm. 166° (Ar. 236, 539). — \*III, 621.
- $C_{24}H_{20}N_4P$  1) Tri[Phenylamido]phosphinphenylimid. Sm. 232°. HCl, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (Am. 19, 357; 27, 444; C. r. 136, 1666 C. 1903 [2] 427). — \*II, 164.
- $C_{24}H_{24}OS_3$  1) Dipropyläther d. 3,5-Dimerkapto-4-Thiocarbonyl-1-Keto-2,6-Diphenyl-1,4-Dihydrobenzol. Sm. 88° (B. 37, 1607 C. 1904 [1] 1444).
- $C_{24}H_{24}O_2N_2$  15)  $\alpha\gamma$ -Di[ $\alpha$ -Oximidobenzyl]- $\beta$ -Phenylbutan. Sm. 204—205° (See. 83, 363 C. 1903 [1] 577, 1129).
- $C_{24}H_{24}O_3N_4$  \*4) Tri[Benzoylamidomethyl]amin (C. 1903 [2] 656).
- $C_{24}H_{24}O_4N_2$  \*1) Dibenzat d.  $\beta$ -[3,5-Dioximido-4-Methylhexahydrophenyl]propen. Sm. 129° (A. 330, 274 C. 1904 [1] 948).
- 3) Dibenzat d.  $\alpha$ -d-Campherdioxim. Sm. 153° (See. 85, 910 C. 1904 [2] 597).
- 4) Dibenzat d.  $\beta$ -d-Campherdioxim. Sm. 191° (See. 85, 910 C. 1904 [2] 598).
- 5) isom. Dibenzat d.  $\beta$ -d-Campherdioxim. Sm. 134° (See. 85, 911 C. 1904 [2] 598).
- 6) Dibenzat d.  $\gamma$ -d-Campherdioxim. Sm. 138° (See. 85, 912 C. 1904 [2] 598).
- 7) Di[Phenylamidoformiat] d.  $\gamma$ -Oxy- $\alpha$ -[2-Oxyphenyl]butan. Sm. 107,5° (B. 36, 2872 C. 1903 [2] 833).
- $C_{24}H_{24}O_4N_4$  5) Acetophenonazobilirubin (H. 29, 411). — \*III, 487.
- $C_{24}H_{24}O_5S_2$  2)  $\epsilon$ -Keto- $\alpha\gamma$ -Diphenylsulfon- $\alpha$ -Phenylhexan. Sm. 107—109° (B. 37, 510 C. 1904 [1] 884).
- $C_{24}H_{24}O_6N_2$  C 60,1 — H 5,5 — O 22,0 — N 6,4 — M. G. 436.
- 1) Diäthylester d.  $\gamma\delta$ -Diimido- $\alpha\zeta$ -Diketohehexan- $\beta\epsilon$ -Dicarbonsäure. Sm. 156,5° (A. 332, 154 C. 1904 [2] 192).
- $C_{24}H_{25}ON$  4)  $\alpha$ -Acetylamidotri[4-Methylphenyl]methan. Sm. 211° (B. 37, 3159 C. 1904 [2] 1048).
- $C_{24}H_{25}O_2N$  4) Acetyltri[4-Methylphenyl]methylhydroxylamin. Sm. 157° (B. 37, 3161 C. 1904 [2] 1049).
- 5) Benzoylderivat d. Base  $C_{17}H_{21}ON$ . Sm. 99—100° (See. 83, 107 C. 1903 [1] 233, 458).
- $C_{24}H_{26}O_2N_2$  6) 3,4-Methylenäther d. 4',4''-Di[Dimethylamido]-3,4-Dioxytriphenylmethan. Sm. 110—112° (B. 36, 2919 C. 1903 [2] 1065).
- $C_{24}H_{26}O_2N_6$  C 67,0 — H 6,0 — O 7,4 — N 19,5 — M. G. 430.
- 1) 1,4-Di[ $\beta$ -Phenylsemicarbazol]-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. Zers. bei 242° (A. 334, 194 C. 1904 [2] 835).
- $C_{24}H_{26}O_4N_2$  3) 3,4-Methylenäther d. 4',4''-Di[Dimethylamido]-3,4,2',2''-Tetraoxytriphenylmethan. Sm. 115° (B. 36, 2920 C. 1903 [2] 1065).
- 4) Dibenzat d. 1-Oxamidocarvoxim. Sm. 168° (A. 330, 373 C. 1904 [1] 948).
- $C_{24}H_{26}O_7N_2$  C 63,4 — H 5,7 — O 24,7 — N 6,2 — M. G. 454.
- 1) Triäthylester d. 1-[5-Isoxazoly]-4-[2,5-Dimethyl-1-Pyrrolyl]-benzol-1',4',4''-Tricarbonsäure. Sm. 189° (B. 36, 396 C. 1903 [1] 723; B. 36, 2696 C. 1903 [2] 952).
- $C_{24}H_{27}O_5N_8$  2) trimolec. Anhydroformaldehyd-4-Anisidin. Sm. 132° (B. 36, 48 C. 1903 [1] 505).
- $C_{24}H_{27}O_6N_7$  C 56,6 — H 5,3 — O 18,9 — N 19,2 — M. G. 509.
- 1) Benzylidenhydrazid d. Benzoyltetra[Amidoacetyl]amidoessigsäure. Sm. 275° (B. 37, 1300 C. 1904 [1] 1337).

- $C_{24}H_{27}O_6N$  C 62,9 — H 5,9 — O 28,0 — N 3,1 — M. G. 457.  
 1) Triäthylester d. 2,5-Dimethylpyrrol-1-Benzoylbrenztraubensäure-3,4-Dicarbonsäure. Sm. 123° (B. 36, 395 C. 1903 [1] 723).
- $C_{24}H_{27}N_2J$  1) Verbindung (aus 2-Methylchinolinjodäthylat) (B. 37, 2016 C. 1904 [2] 125).
- $C_{24}H_{28}O_2N_2$  6) 4,6-Dioxy-1,3-Di[4-Aethylamidobenzyl]benzol. Sm. 101°.  $H_2SO_4$  (M. 23, 995 C. 1903 [1] 290).
- $C_{24}H_{28}O_4N_2$  9) 1,2,3,4-Tetrahydro-2-Naphtylamid d. d-Weinsäure. Sm. 221° (Soc. 83, 1345 C. 1904 [1] 83).
- 10) 1,2,3,4-Tetrahydro-6-Naphtylamid d. d-Weinsäure. Sm. 186° (Soc. 83, 1344 C. 1904 [1] 83).
- $C_{24}H_{28}O_4N_4$  \*4) Di[Phenylamidoformiat] d. d-Oxamidocarvoxim. Sm. 161° (A. 330, 274 C. 1904 [1] 948).
- 5) Di[Phenylamidoformiat] d. l-Oxamidocarvoxim. Sm. 152° (A. 330, 273 C. 1904 [1] 948).
- 6) Di[Phenylamidoformiat] d. Eucarvonoxaminoxim. Sm. 157° (A. 330, 277 C. 1904 [1] 948).
- $C_{24}H_{28}O_{15}N_{12}$  C 23,9 — H 2,3 — O 59,8 — N 14,0 — M. G. 1204.
- $C_{24}H_{29}ON_3$  1) Nitrocellulose (C. r. 136, 899 C. 1903 [1] 1081).
- 3)  $\alpha$ -Oxy-6-Amido-4',4'-Di[Dimethylamido]-3-Methyltriphenylmethan (2,5-Amidomethylmalachitgrün). Sm. 200° u. Zers. (B. 36, 2783 C. 1903 [2] 881).
- $C_{24}H_{29}O_2N$  C 79,3 — H 8,0 — O 8,8 — N 3,9 — M. G. 363.  
 1) 2-Dekylchinolin-4-Carbonsäure (Bl. [3] 29, 1205 C. 1904 [1] 355).
- $C_{24}H_{30}OS_2$  1) Diphenylmenthylimidoxanthid (C. 1904 [1] 1347).
- $C_{24}H_{30}O_7N_2$  C 62,9 — H 6,5 — O 24,4 — N 6,1 — M. G. 458.  
 1) Homonarceinamid. Sm. 111° (D.R.P. 58394). — \*II, 1219.
- $C_{24}H_{30}O_8N_4$  \*1) Anhydrid d. Milchzuckerdi[Phenylhydrazon]. Sm. 223—224° (Bl. [3] 29, 1225 C. 1904 [1] 361).
- $C_{24}H_{31}O_6N$  C 69,7 — H 7,5 — O 19,4 — N 3,4 — M. G. 413.  
 1) Butylhydroxyd d. Papaverin. Salze siehe (B. 37, 3810 C. 1904 [2] 1574).
- $C_{24}H_{31}O_6Br$  1) Verbindung (aus Dibromasaron). Sm. 109,5° (Ar. 242, 101 C. 1904 [1] 1008).
- $C_{24}H_{32}O_2N_2$  2) Piperidomethylmorphimethin. Fl. (2HCl, PtCl<sub>4</sub>) (B. 36, 1593 C. 1903 [2] 54).
- 3) Di[4-Methylphenylamid] d.  $\beta$ -Methylheptan- $\gamma$ - $\zeta$ -Dicarbonsäure. Sm. 229° (C. r. 136, 459 C. 1903 [1] 696).
- $C_{24}H_{32}O_3N_2$  C 72,7 — H 8,1 — O 12,1 — N 7,1 — M. G. 396.  
 1) Diäthylderivat d. Yohimboasäure. Sm. 189° (191,5—192°) (B. 37, 1764 C. 1904 [1] 1527).
- $C_{24}H_{32}O_8N_2$  C 60,5 — H 6,7 — O 26,9 — N 5,9 — M. G. 476.  
 1) Tetraäthylester d. 2,5,2',5'-Tetramethyl-1,1'-Bipyrrol-3,4,3',4'-Tetracarbonsäure. Sm. 126—127° (B. 37, 2699 C. 1904 [2] 532).
- $C_{24}H_{32}O_9N_4$  \*3) Di[Phenylhydrazon] d. Milchzucker (Bl. [3] 29, 1225 C. 1904 [1] 361).
- $C_{24}H_{33}O_3N$  2) 4-Acetat d. Di[4-Oxy-2-Methyl-5-Isopropylphenyl]amin-4'-Aethyläther. Sm. 122—123° (B. 36, 2888 C. 1903 [2] 875).
- $C_{24}H_{33}O_6N$  C 66,8 — H 7,7 — O 22,3 — N 3,2 — M. G. 431.  
 1) 3,4,3',4'-Tetramethyläther- $\beta\beta$ -Diäthyläther d.  $\alpha$ -[ $\beta\beta$ -Dioxyäthyl]-imido- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Fl. (A. 329, 57 C. 1903 [2] 1448).
- $C_{24}H_{34}O_7Cl_2$  1) Dichlormonodesoxybiliansäure. Sm. 249—250° (M. 24, 52 C. 1903 [1] 765).
- $C_{24}H_{35}O_2N$  \*1) Diäthyläther d. Di[4-Oxy-2-Methyl-5-Isopropylphenyl]amin. (HCl, SnCl<sub>2</sub> + 3H<sub>2</sub>O), HJ (B. 36, 2887 C. 1903 [2] 874).
- $C_{24}H_{35}O_6N_8$  \*1) Verbindung (aus Thymoläthyläther). Sm. 79°. 2HNO<sub>3</sub> (B. 36, 2886 C. 1903 [2] 874).
- $C_{24}H_{35}O_8N_2$  2) Verbindung (aus Isobiliansäure). Zers. bei 270° (M. 24, 56 C. 1903 [1] 766).
- $C_{24}H_{38}OBr_2$  1) Alstoldibromid. Sm. 135—138° (B. 37, 4111 C. 1904 [2] 1656).
- $C_{24}H_{39}O_4N$  C 71,1 — H 9,6 — O 15,8 — N 3,5 — M. G. 405.  
 1) 2-Nitrophenylester d. Stearinsäure. Sm. 60—61° (A. 332, 206 C. 1904 [2] 211).

- $C_{24}H_{40}O_5N_2$  2) isom. Phenylhydrazonoxystearinsäure. Sm. 102,5—105° (*B.* 36, 2659 *C.* 1903 [2] 826).  
 $C_{24}H_{44}O_{12}N_6$  1) Hexa[Aethylamidoformiat] d. d-Mannit. Sm. 270° (*C. r.* 138, 636 *C.* 1904 [1] 1068).  
 $C_{24}H_{46}O_4Br$  1) Bromacetoxybehensäure (*C.* 1903 [1] 319; *J. pr.* [2] 67, 298 *C.* 1903 [1] 1404).  
 $C_{24}H_{46}ON_2$  1) 2,5-Diundekyl-1,3,4-Oxdiazol. Sm. 56°; Sd. 275°<sub>22</sub> (*J. pr.* [2] 69, 503 *C.* 1904 [2] 601).  
 $C_{24}H_{46}N_2S$  1) 2,5-Diundekyl-1,3,4-Thiodiazol. Sm. 49° (*J. pr.* [2] 69, 504 *C.* 1904 [2] 601).  
 $C_{24}H_{54}N_3P$  1) Tri[Diisobutylamido]phosphin. Sd. 190—200°<sub>18</sub> (*A.* 326, 170 *C.* 1903 [1] 762).

## — 24 IV —

- $C_{24}H_{10}ON_2Br_2$  1) Verbindung (aus 3-Brom-7,8-Acenaphtenchinon). Sm. noch nicht bei 300° (*A.* 327, 88 *C.* 1903 [1] 1228).  
 $C_{24}H_{10}O_4N_3S$  1)  $\alpha\alpha$ -Dinitrodinaphtylenthiofen (*B.* 36, 3771 *C.* 1903 [2] 1446).  
 $C_{24}H_{14}O_6N_2S$  1) 2-[2-Oxy-1-Naphtylazo]-9,10-Anthrachinon-2'-Sulfonsäure (*C.* 1904 [1] 289).  
 $C_{24}H_{16}O_2N_3Br_2$  1)  $\beta$ -Dibrom-m-Xylylindigo (D.R.P. 154338 *C.* 1904 [2] 1080).  
 $C_{24}H_{17}O_3N_3Br$  2) Brom-m-Xylylindigo (D.R.P. 154338 *C.* 1904 [2] 1080).  
 $C_{24}H_{18}ON_3Br$  3) 3- oder -6-Brom-2,5-Di[Phenylamido]-4-Phenylimido-1-Keto-1,4-Dihydrobenzol. Sm. 173° (*B.* 35, 3854 *C.* 1903 [1] 26; *Am.* 30, 531 *C.* 1904 [1] 366).  
 $C_{24}H_{18}O_5NCl_3$  1) Trichlordiäthylamidofluoran (D.R.P. 139727 *C.* 1903 [1] 796).  
 $C_{24}H_{18}O_4N_5Cl$  1) 6-Chlor-2,4-Dinitro-1,3,5-Tri[Phenylamido]benzol. Sm. 179°. +  $C_6H_6$ , +  $C_7H_8$ , +  $C_8H_{10}$ , +  $CHCl_3$  (*Am.* 31, 367 *C.* 1904 [1] 1408).  
 $C_{24}H_{18}O_7N_4S_2$  1) Disazoverbindung (aus 4,4'-Diamido-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure u. 2-Oxynaphtalin). Ba (*J. pr.* [2] 66, 566 *C.* 1903 [1] 519).  
 $C_{24}H_{19}O_2N_6Br_2$  1)  $\beta$ -Dibrom- $\beta$ -Di[Phenylamido]-1,2-Benzochinon + Anilin. Sm. 123° (*B.* 35, 3853 *C.* 1903 [1] 26).  
 $C_{24}H_{20}ON_2S$  1) 2-[2-Methylphenyl]imido-4-Keto-3-[2-Methylphenyl]-5-Benzylidentetrahydrothiazol. Sm. 179—180°. +  $C_2H_5ONa$  (*C.* 1903 [1] 1258).  
 $C_{24}H_{20}O_5NCl$  1) Chlordiäthylamidofluoran. Sm. 148° (D.R.P. 139727 *C.* 1903 [1] 796).  
 $C_{24}H_{20}O_3N_3Cl_2$  1) s-Dichlordiäthylrhodamin (D.R.P. 108347). — \*III, 575.  
 $C_{24}H_{20}O_4N_3S_2$  \*1) 4,4'-Di[Phenylsulfonamido]biphenyl. Sm. 234,5° (*B.* 37, 3772 *Ann. C.* 1904 [2] 1547).  
 $C_{24}H_{20}O_4N_3S_3$  1) Di[Phenylamid] d. Disulfid-4,4'-Disulfonsäure. Sm. 212,5° (*R.* 22, 360 *C.* 1904 [1] 23).  
 $C_{24}H_{21}O_5N_3Br_3$  2) 1,3-Diacetylderivat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[Phenylamidomethyl]benzol. Sm. 207—208° (*B.* 37, 3908 *C.* 1904 [2] 1593).  
 $C_{24}H_{22}O_3Br_2S$  3) 3,4-Diacetylderivat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[Phenylamidomethyl]benzol. Sm. 200—201° (*B.* 37, 3909 *C.* 1904 [2] 1593).  
 $C_{24}H_{22}O_4N_2Cl_2$  1)  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Methylphenyl]sulfon- $\gamma$ -Keto- $\alpha\epsilon$ -Diphenylpentan (*Am.* 31, 182 *C.* 1904 [1] 877).  
 $C_{24}H_{22}O_4N_2Cl_2$  1)  $\beta$ -Dichlor-1,2-Di[ $\beta$ -Dimethylamido- $\beta$ -Oxybenzoyl]benzol (*Bl.* [3] 29, 61 *C.* 1903 [1] 456).  
 $C_{24}H_{23}O_2N_2Br_3$  1) 3-Acetylderivat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[2-Methylphenylamidomethyl]benzol. Sm. 190—191° (*B.* 37, 3912 *C.* 1904 [2] 1593).  
 $C_{24}H_{23}O_2N_2Br_3$  2) 3-Acetylderivat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[4-Methylphenylamidomethyl]benzol. Sm. 206° (*B.* 37, 3910 *C.* 1904 [2] 1593).  
 $C_{24}H_{26}O_8N_4S_2$  1) Phenylhydrazid d.  $\alpha$ -[2,4-Dimethylphenylthiosulfon]- $\beta$ -Phenylhydrazonbuttersäure. Sm. 150° u. Zers. (*J. pr.* [2] 70, 387 *C.* 1904 [2] 1720).  
 $C_{24}H_{28}O_4N_4S_2$  1) 1,3-Di[ $\beta$ -Phenylhydrazonpropylsulfon]benzol. Sm. 172° u. Zers. (*J. pr.* [2] 68, 326 *C.* 1903 [2] 1171).  
 $C_{24}H_{27}O_7N_6P$  1) Tri[ $\beta$ -Nitro-2,4-Dimethylphenylamid] d. Phosphorsäure (*A.* 326, 252 *C.* 1903 [1] 868).

- $C_{24}H_{28}O_2N_4S_2$  1) Di[Phenylamidothioformiat] d. Oxamidocarvoxim. Sm. 142 bis 143° (B. 32, 1347). — \*III, 86.
- $C_{24}H_{28}O_6NCl$  1) Verbindung (aus Chlordimethyläther u. Narkotin). Sm. 210° u. Zers. +  $AuCl_3$  (A. 334, 55 C. 1904 [2] 948).
- $C_{24}H_{28}O_{10}N_2S_2$  1) Benzol-1,3-Disulfonsäure + 2 Molec. 4-Amidobenzol-1-Carbonsäureäthylester. Zers. bei 235° (D.R.P. 150070 C. 1904 [1] 975).
- $C_{24}H_{30}ON_3P$  3) Tri[Aethylphenylamid] d. Phosphorsäure. Sm. 182° (A. 326, 257 C. 1903 [1] 869).
- 4) Tri[2,4-Dimethylphenylamid] d. Phosphorsäure. Sm. 198° (225°) (A. 326, 252 C. 1903 [1] 868; C. 1904 [2] 647).
- 5) Tri[2,5-Dimethylphenylamid] d. Phosphorsäure. Sm. 247° (A. 326, 252 C. 1903 [1] 868).
- 6) Tri[3,4-Dimethylphenylamid] d. Phosphorsäure. Sm. 183° (A. 326, 252 C. 1903 [1] 868).
- $C_{24}H_{30}O_4NCl$  1) Chlorbutylat d. Papaverin +  $2H_2O$ . Sm. 131—132°. 2 +  $PtCl_4$ , +  $AuCl_3$  (B. 37, 3810 C. 1904 [2] 1574).
- $C_{24}H_{30}O_4NBr$  1) Brombutylat d. Papaverin +  $2H_2O$  (B. 37, 3810 C. 1904 [2] 1574).
- $C_{24}H_{30}O_4NJ$  1) Jodisobutylat d. Papaverin. Sm. 171—172° (B. 37, 3811 C. 1904 [2] 1574).
- $C_{24}H_{31}O_2N_2J$  \*1) Äthylester d.  $\alpha\beta$ -Di[1,2,3,4-Tetrahydro-2-Isochinolyl]äthan-2-Jodammoniumessigsäure. Sm. 158—159° (B. 36, 1168 C. 1903 [1] 1187).
- $C_{24}H_{33}O_2N_2J$  1) Jodmethylat d. Piperidocodid. Sm. 256° (B. 36, 1593 C. 1903 [2] 54).
- $C_{24}H_{54}ON_3P$  1) Tri[Diisobutylamid] d. Phosphorsäure. Fl. (A. 326, 200 C. 1903 [1] 821).
- $C_{24}H_{54}O_6N_3P_3$  1) trim. Phosphinodiisobutylamin. Sm. 79°; Sd. 255°<sub>16</sub> (A. 326, 193 C. 1903 [1] 820).
- $C_{24}H_{54}N_3SP$  1) Tri[Diisobutylamid] d. Thiophosphorsäure. Fl. (A. 326, 218 C. 1903 [1] 822).

## — 24 V —

- $C_{24}H_{27}ON_3S_3P$  2) Phosphoryltri[4-Methylphenylthioharnstoff]. Sm. 95—100° u. Zers. (Soc. 85; 367 C. 1904 [1] 1407).

**C<sub>25</sub>-Gruppe.**

- $C_{25}H_{20}$  \*1) Tetraphenylmethan. Sm. 282° (285°); Sd. 431°<sub>760</sub> (B. 36, 408 C. 1903 [1] 586; B. 36, 1090 C. 1903 [1] 1356).
- $C_{25}H_{22}$  \*2)  $\alpha$ -Dypnokinakolen. Sm. 98°; Sd. 292—295°<sub>40</sub> (C. 1903 [2] 1373).
- 3) 2,5-Dimethyl-1,3,4-Triphenyl-R-Penten. Sm. 127—128° (Soc. 83, 370 C. 1903 [1] 569).
- $C_{25}H_{24}$  \*1) Kohlenwasserstoff (aus  $\alpha$ -Dypnopinakolen). Sm. 145°; Sd. 275—280°<sub>38</sub> (C. 1903 [2] 1373).
- 2) Kohlenwasserstoff (aus  $\alpha$ -Dypnopinakolen). Sm. 115°; Sd. 275—280°<sub>35</sub> (C. 1903 [2] 1373).
- $C_{25}H_{26}$  C 92,0 — H 8,0 — M. G. 326.
- 1) 1,3-Dimethyl-2,4,5-Triphenyl-R-Pentamethylen. Sm. 80—81° (Soc. 83, 371 C. 1903 [1] 568).
- 2) isom. 1,3-Dimethyl-2,4,5-Triphenyl-R-Pentamethylen. Sd. 246—248°<sub>35</sub> (Soc. 83, 371 C. 1903 [1] 568).
- 3) Kohlenwasserstoff (aus  $\alpha$ -Dypnopinakolen) (Gemisch) (C. 1903 [2] 1373).

## — 25 II —

- $C_{25}H_{18}O$  2) 9-Phenyl-9-[4-Oxyphenyl]fluoren. Sm. 191° (B. 37, 77 C. 1903 [1] 519).
- 3) 9,9-Diphenylxanthen. Sm. 200° (B. 37, 2369 C. 1904 [2] 344).
- $C_{25}H_{18}O_2$  2) Benzoat d. 2-Oxy-1,4-Diphenylbenzol. Sm. 105° (B. 36, 1409 C. 1903 [1] 1358).

- $C_{25}H_{18}O_3$  2) Anhydrid d.  $\alpha\alpha$ -Diphenyl- $\delta$ -[4-Methylphenyl]- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm. 194° (B. 37, 2661 C. 1904 [2] 523).
- $C_{25}H_{18}O_5$  2) 2,4,6-Triphenyl-1,4-Pyron-3,5-Dicarbonsäure (Dehydrobenzyliden-bisbenzoylessigsäure). Sm. 141° u. Zers. (G. 33 [2] 150 C. 1903 [2] 1270).
- $C_{25}H_{18}O_8$  2) Triacetat d. 2,3,7-Trioxy-9-Phenylfluoren. Sm. 230—233° (B. 37, 1174 C. 1904 [1] 1161).
- $C_{25}H_{19}N$  C 90,1 — H 5,7 — N 4,2 — M. G. 333.  
 1) 4-Phenylimido-1-Diphenylmethylen-1,4-Dihydrobenzol. Sm. 133 bis 138°. HCl, Pikrat +  $\frac{1}{2}C_6H_6$  (B. 37, 609 C. 1904 [1] 887).  
 2) 9-Phenyl-9-[4-Amidophenyl]fluoren. Sm. 179° (B. 37, 75 C. 1904 [1] 519).  
 3) 5,5-Diphenyl-5,10-Dihydroakridin. Sm. 243,5—244,5° (B. 37, 3202 C. 1904 [2] 1472).
- $C_{25}H_{19}Br$  1) Verbindung (aus  $\alpha$ -Dypnopinakolen). Sm. 140°; Sd. oberh. 360° u. Zers. (C. 1903 [2] 1373).
- $C_{25}H_{20}O$  \*3) 4-Oxytetraphenylmethan (B. 37, 660 C. 1904 [1] 952).
- $C_{25}H_{20}O_2$  5) 3<sup>4</sup>-Methyläther d. 5-Oxy-1,2-Diphenyl-3-[4-Oxyphenyl]benzol. Sm. 159—160° (Am. 31, 148 C. 1904 [1] 806).  
 6) 2-Phenyläther d.  $\alpha$ ,2-Dioxytriphenylmethan. Sm. 120° (B. 37, 2368 C. 1904 [2] 344).
- $C_{25}H_{20}O_4$  4) 2<sup>3,4</sup>-Methylenäther d. 4-Keto-1-Oxy-1,6-Diphenyl-2-[3,4-Dioxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 240° (Am. 31, 148 C. 1904 [1] 807).  
 5)  $\alpha\alpha$ -Diphenyl- $\delta$ -[4-Methylphenyl]- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm. 231°. Na<sub>2</sub> (B. 37, 2660 C. 1904 [2] 523).
- $C_{25}H_{20}O_6$  5) 2<sup>3,6</sup>-Dimethyläther-3<sup>3,4</sup>-Methylenäther d. 6-Oxy-2-[2-Oxyphenyl]-3-[3,4-Dioxybenzyliden]-2,3-Dihydro-1,4-Benzpyron. Sm. 207—209° (B. 37, 3171 C. 1904 [2] 1059).  
 6) 7,8-Dimethyläther-3<sup>3,4</sup>-Methylenäther d. 7,8-Dioxy-2-Phenyl-3-[3,4-Dioxybenzyliden]-2,3-Dihydro-1,4-Benzpyron. Sm. 185° (B. 37, 3172 C. 1904 [2] 1059).  
 7) Dimethylester d. 2,4-Dibenzoyl-1-Methylbenzol-3,5-Dicarbonsäure. Fl. (P. Ch. S. Nr. 203). — \*II, 1192.  
 8) Aethylester d.  $\beta$ -[3,4-Dibenzoxylphenyl]akrylsäure. Sm. 104—105° (B. 36, 2935 C. 1903 [2] 888).
- $C_{25}H_{20}O_9$  4) Monobenzoat d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinontetramethyläther. Sm. 195—205° (D.R.P. 151724 C. 1904 [1] 1587).
- $C_{25}H_{20}O_{12}$  \*1) Pentaacetat d. 3,5,7-Trioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (P. d. Quercetin). Sm. 193—194° (B. 37, 1405 C. 1904 [1] 1356).
- $C_{25}H_{20}N_2$  \*2)  $\alpha$ -Phenylazotriphenylmethan. Sm. 113—114° (B. 36, 1089 C. 1903 [1] 1355).  
 8)  $\alpha$ -Phenylimido- $\alpha$ -Diphenylamido- $\alpha$ -Phenylmethan. Sm. 170° (B. 37, 2683 C. 1904 [2] 521).  
 9) 3-[ $\alpha$ -Phenylhydrazonbenzyl]acenaphten. Sm. 140° (A. 327, 96 C. 1903 [1] 1228).
- $C_{25}H_{21}N$  3) 4-Amidotetraphenylmethan. Sm. 256°. HCl (B. 36, 407 C. 1903 [1] 585).
- $C_{25}H_{21}N_3$  \*1) Tetrphenylguanidin. Sm. 137—140° (B. 37, 964 C. 1904 [1] 1002).
- $C_{25}H_{22}O_3$  2) 3<sup>4</sup>-Methyläther d. 4-Keto-1-Oxy-1,6-Diphenyl-2-[4-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 233,5° (Am. 31, 147 C. 1904 [1] 806).
- $C_{25}H_{22}O_4$  5) 3<sup>4</sup>-Methyläther-6-Aethyläther d. 6-Oxy-2-Phenyl-3-[4-Oxybenzyliden]-2,3-Dihydro-1,4-Benzpyron. Sm. 157° (B. 37, 3170 C. 1904 [2] 1059).
- $C_{25}H_{22}O_5$  3) 3<sup>4,7,8</sup>-Trimethyläther d. 7,8-Dioxy-2-Phenyl-3-[4-Oxybenzyliden]-2,3-Dihydro-1,4-Benzpyron. Sm. 186° (B. 37, 3171 C. 1904 [2] 1059).
- $C_{25}H_{22}N_2$  \*1)  $\alpha$ -Phenylhydrazidotriphenylmethan. Sm. 136—137° (B. 36, 1089 C. 1903 [1] 1355).  
 11)  $\alpha$ -[1-Naphtyl]imido-4-Dimethylamidodiphenylmethan. Sm. 167° (D.R.P. 41751). — \*III, 150.
- $C_{25}H_{23}N_3$  2)  $\alpha$ -Imido- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha$ -[4-Phenylamido-1-Naphtyl]-methan. Sm. 186°. HCl (B. 37, 1906 C. 1904 [2] 116).
- $C_{25}H_{24}O_2$  \*4)  $\beta\delta$ -Dibenzoyl- $\gamma$ -Phenylpentan. Sm. 162—163° (Soc. 83, 364 C. 1903 [1] 578, 1129).

- $C_{25}H_{24}O_5$  C 74,3 — H 5,9 — O 19,8 — M. G. 404.  
 1) 7-Acetat d. 7-Oxy-4-[3,5-Dioxyphenyl]-2-Phenyl-2,3-Dihydro-1,4-Benzpyran-4<sup>3,5</sup>-Dimethyläther. Sm. 120—125° (B. 36, 2300 C. 1903 [2] 577).
- $C_{25}H_{24}O_{11}$  2) Diacetat d. Barbaloïn (Bl. [3] 21, 672). — \*III, 453.  
 3) Pentaacetat d. Acakatechin. Sm. 158—160° (C. 1904 [2] 439).  
 4) Pentaacetat d. Cyanomaklurin. Sm. 136—138° (C. 1904 [2] 438).
- $C_{25}H_{24}O_{12}$  2) Hexaacetat d. Di[P-Trioxyphenyl]methan. Sm. 152—155° (B. 37, 1177 C. 1904 [1] 1161).
- $C_{25}H_{26}O_2$  C 83,8 — H 7,2 — O 8,9 — M. G. 358.  
 1) 4,5-Dioxy-1,3-Dimethyl-2,4,5-Triphenyl-R-Pentamethylen. Sm. 143—144° (Soc. 83, 369 C. 1903 [1] 568).
- $C_{25}H_{26}O_9$  2) Tetraacetat d. 1,3,6,8-Tetraoxy-2,4,5,7-Tetramethylxanthen. Sm. 268—270° (M. 25, 675 C. 1904 [2] 1145).
- $C_{25}H_{26}O_{10}$  3) 1,3,6,8-Tetraacetat d. 1,3,6,8,9-Pentaoxy-2,4,5,7-Tetramethylxanthen. Sm. 255—260° (M. 25, 676 C. 1904 [2] 1145).
- $C_{25}H_{26}O_{11}$  \*1) Ononin (M. 24, 135 C. 1903 [1] 1032; M. 25, 555 C. 1904 [2] 907).
- $C_{25}H_{28}O$  2) 2-Keto-1,3-Di[4-Isopropylbenzyliden]-R-Pentamethylen. Sm. 143° (B. 36, 1502 C. 1903 [1] 1351).
- $C_{25}H_{28}O_8$  2) Methylester d. Dibenzoxylidihydropulegensäure. Sm. 204—206° (A. 327, 127 C. 1903 [1] 1412).
- $C_{25}H_{28}O_8$  \*1) Acetat d. Quercetintetraäthyläther. Sm. 152—153° (Ar. 242, 239 C. 1904 [1] 1652).  
 2) Tetraäthylätheracetat d. Morin. Sm. 121—123° (Soc. 85, 61 C. 1904 [1] 381, 729).
- $C_{25}H_{28}N_4$  4) Phenylhydrazon d. Base  $C_{19}H_{22}ON_2$  (aus Allocinchonin). Sm. 94 bis 96° u. Zers. (M. 22, 203). — \*III, 640.
- $C_{25}H_{30}O_4$  2) 1-Menthylester d. 1- $\alpha$ -Benzoxylphenylelessigsäure. Sm. 54—55° (Soc. 85, 1255 C. 1904 [2] 1304).
- $C_{25}H_{30}O_7$  C 67,9 — H 6,8 — O 25,3 — M. G. 442.  
 1) Monomethyläther d. Dihydroflavaspidsäurexanthen. Sm. 249 bis 250° (A. 329, 319 C. 1904 [1] 799).  
 2) Verbindung (aus Aspidin). Sm. 216° (A. 329, 332 C. 1904 [1] 800).
- $C_{25}H_{32}O_8$  \*1) Albaspidin (Polystichalbin). Sm. 150—150,5°. Anilinsalz (C. 1895 [1] 887; 1898 [2] 1103; A. 329, 322 Anm. C. 1904 [1] 799). — \*III, 474.  
 3) Pseudoaspidin. Sm. 158—159° (A. 329, 334 C. 1904 [1] 800).  
 4) Dihydroflavaspidmethyläthersäure. Sm. 201—202° (A. 329, 320 C. 1904 [1] 799).  
 5) 2,2'-Dimethyläther d. Di[2,4,6-Trioxy-5-Propionyl-3-Methylphenyl]methan (Methylenbisaspidinol). Sm. 190—191° (A. 329, 287 C. 1904 [1] 796).  
 6) Aspidin (Polystichin; Polystichumsäure). Sm. 124—125° (C. 1895 [1] 887; 1896 [2] 1036; 1898 [2] 1103; 1899 [2] 919; A. 329, 327 C. 1904 [1] 799). — \*III, 457, 474.
- $C_{25}H_{38}O_2$  C 81,1 — H 10,3 — O 8,6 — M. G. 370.  
 1) Verbindung (aus Asclepias syriaca L.). Sm. 87—88° (J. pr. [2] 68, 408 C. 1904 [1] 105).
- $C_{25}H_{40}O_9$  2) Verbindung (aus Asclepias syriaca L.) (J. pr. [2] 68, 410 C. 1904 [1] 105).
- $C_{25}H_{40}O_8$  C 64,1 — H 8,5 — O 27,3 — M. G. 468.  
 1) Saxatsäure. Sm. 115°. Ba (J. pr. [2] 68, 41 C. 1903 [2] 512).
- $C_{25}H_{40}O_{10}$  3) Lepanthin. Sm. 183° (A. 336, 43 C. 1904 [2] 1324).
- $C_{25}H_{42}O_2$  2) Verbindung (aus Asclepias syriaca L.) oder  $C_{28}H_{44}O_2$ . Sm. 87—90° (J. pr. [2] 68, 453 C. 1904 [1] 191).
- $C_{25}H_{42}O_{12}$  C 56,2 — H 7,9 — O 35,9 — M. G. 534.  
 1) Cyklamin. Sm. 225° (B. 36, 1761 C. 1903 [2] 119).
- $C_{25}H_{48}O_4$  C 73,2 — H 11,2 — O 15,6 — M. G. 410.  
 1) Isobutylester d. Propionylricinolsäure. Sd. 325—335°<sub>800</sub> (B. 36, 788 C. 1903 [1] 824).
- $C_{25}H_{48}O_8$  2) norm. Heptylester d. Ricinolsäure. Sd. 295°<sub>10</sub> (B. 36, 785 C. 1903 [1] 824).
- $C_{25}H_{50}O_8$  2) Cerebronsäure. Sm. 99°. Na (H. 43, 26 C. 1904 [2] 1550).

- $C_{25}H_{13}O_3N$  C 80,0 — H 3,5 — O 12,8 — N 3,7 — M. G. 375.  
 1)  $\alpha\beta$ -Benzoylen- $\alpha_1\beta_1$ -Phtalyl-N-Phenylpyrrol (B. 35, 3959 C. 1903 [1] 32).
- $C_{25}H_{15}O_4N$  3) 3-Phenylamido-2-[1,3-Diketo-2,3-Dihydro-2-Indenyl]-1,4-Naphtochinon (B. 35, 3958 C. 1903 [1] 32).  
 C 55,1 — H 2,9 — O 26,5 — N 15,4 — M. G. 544.
- $C_{25}H_{16}O_9N_6$  1) 3,5,3',5'-Tetranitro-4,4'-Di[Phenylamido]diphenylketon. Sm. 262° (G. 34 [1] 382 C. 1904 [2] 111).  
 C 75,9 — H 4,3 — O 16,2 — N 3,5 — M. G. 395.
- $C_{25}H_{17}O_4N$  1) 1-Naphtylester d.  $\beta$ -[4-Nitrophenyl]- $\alpha$ -Phenylakrylsäure. Sm. 126 bis 127° (G. 33 [2] 475 C. 1904 [1] 655).  
 C 65,9 — H 3,7 — O 21,1 — N 9,2 — M. G. 455.
- $C_{25}H_{17}O_6N_3$  1) Trinitrotetraphenylmethan. Sm. bei 330° (B. 36, 1091 C. 1903 [1] 1356).
- $C_{25}H_{18}O_5N_4$  \*1) 3,3'-Dinitro-4,4'-Di[Phenylamido]diphenylketon. Sm. 212° (G. 34 [1] 377 C. 1904 [2] 110).
- $C_{25}H_{19}ON$  3) 9-[4-Amidophenyl]-9-Phenylxanthen. Sm. 227,5°. HCl (B. 37, 2372 C. 1904 [2] 344).
- $C_{25}H_{19}O_4N_3$  4) Di[2-Naphtylamid] d. Acetoximidomalonsäure. Sm. 179° u. Zers. (Soc. 83, 42 C. 1903 [1] 442).  
 C 63,6 — H 4,2 — O 20,3 — N 11,9 — M. G. 472.
- $C_{25}H_{20}O_6N_4$  1) Verbindung (aus Knochenkohle) (C. 1903 [2] 960).
- $C_{25}H_{20}O_2S$  1)  $\alpha$ -Phenylsulfontriphenylmethan. Sm. 175—176° (B. 36, 2789 C. 1903 [2] 882).
- $C_{25}H_{20}N_2S$  4) Phenyläther d.  $\alpha$ -Merkapto- $\alpha$ -Phenylimido- $\alpha$ -Diphenylamidomethan (Isothiotetraphenylharnstoff). Sm. 185—188° (B. 37, 965 C. 1904 [1] 1002).
- $C_{25}H_{21}ON$  5)  $\alpha$ -Oxy-2-Phenylamidotriphenylmethan. Sm. 127,5—128,5° (B. 37, 3202 C. 1904 [2] 1472).
- $C_{25}H_{21}O_3N_3$  6)  $\alpha$ -Oxy-4-Phenylamidotriphenylmethan (B. 37, 3211 C. 1904 [1] 888).  
 7) Verbind. d. 2-Naphtyl-4-Nitrophenyl-äther. Sm. 230° (B. 36, 4328 C. 1904 [1] 462).
- $C_{25}H_{21}O_4N$  8) Verbindung (aus 2-Methylindol u. 4-Nitrobenzaldehyd). Sm. 233° (B. 36, 4328 C. 1904 [1] 462).  
 C 75,2 — H 5,3 — O 16,0 — N 3,5 — M. G. 399.
- 1) 2<sup>34</sup>-Methylenäther d. 4-Oximido-1-Oxy-1,6-Diphenyl-2-[3,4-Dioxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 190—191° (Ann. 31, 149 C. 1904 [1] 807).  
 2) Verbindung (aus d. Verb.  $C_{25}H_{23}O_4N$ ). Sm. 128° (C. r. 139, 298 C. 1904 [2] 714).
- $C_{25}H_{21}N_2Br$  2) Brom-1-Naphtylat d. 2-[1-Naphtyl]amido-1,2-Dihdropyridin. Sm. 158° (J. pr. [2] 69, 129 C. 1904 [1] 815).  
 3) Brom-2-Naphtylat d. 2-[2-Naphtyl]amido-1,2-Dihdropyridin. Sm. 182° (J. pr. [2] 69, 126 C. 1904 [1] 815).
- $C_{25}H_{22}ON_2$  3) 4-Dimethylamidophenyl-4-Phenylamido-1-Naphtylketon. Sm. 201 bis 202° (D.R.P. 79390; C. 1903 [1] 87; B. 37, 1902 C. 1904 [2] 115). — \*III, 195.
- 4)  $\alpha$ -[2-Oxyphenyl]- $\alpha\alpha$ -Di[2-Methyl-3-Indolyl]methan. Sm. 230—231° (B. 36, 4328 C. 1904 [1] 462; B. 37, 323 C. 1904 [1] 668).  
 C 76,1 — H 5,6 — O 4,1 — N 14,2 — M. G. 394.
- $C_{25}H_{22}ON_4$  1) 3,3'-Diamido-4,4'-Di[Phenylamido]diphenylketon. Sm. 160° (G. 34 [1] 378 C. 1904 [2] 110).  
 2)  $\alpha\beta$ -Di[Phenylamido]harnstoff. Sm. 239—240° (B. 36, 3157 C. 1903 [2] 1057).
- $C_{25}H_{22}O_8N_2$  2) Verbindung (aus  $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\gamma\delta$ -Oxyd- $\beta\beta$  Dicarbonsäure). Sm. 182° u. Zers. (Soc. 83, 307 C. 1903 [1] 879).
- $C_{25}H_{23}ON_3$  2) 1-[4-Aethylbenzylamidophenyl]azo-1-Oxynaphtalin. Sm. 135,5° (A. 334, 264 C. 1904 [2] 902).
- $C_{25}H_{23}O_2N_3$  C 75,6 — H 5,8 — O 8,0 — N 10,6 — M. G. 397.  
 1) 8-Nitro-6-tert. Amyl-2,3-Diphenyl-1,4-Benzdiazin. Sm. 189—190° (A. 327, 215 C. 1903 [1] 1408).

- $C_{25}H_{23}O_3N$  2) 3<sup>4</sup>-Methyläther d. 4-Oximido-1-Oxy-1,6-Diphenyl-2-[4-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 196° (*Am.* 31, 147 *C.* 1904 [1] 806).
- 3) Benzoat d. Methylapomorphin. +  $C_2H_5O$  (Sm. 85—90°) (*B.* 35, 4388 *C.* 1903 [1] 339).
- $C_{25}H_{23}O_3N_3$  C 72,6 — H 5,6 — O 11,6 — N 10,1 — M. G. 413.
- 1) Aethylester d. 4[oder 5]-Phenylhydrazon-5-[oder 4]-Keto-1,2-Diphenyltetrahydropyrrrol-3-Carbonsäure. Sm. 150° (*C. r.* 139, 212 *C.* 1904 [2] 656).
- $C_{25}H_{23}O_4N$  2) Verbindung (aus d. Verb.  $C_{25}H_{25}O_6N$ ). Sm. 146—147° (*C. r.* 139, 298 *C.* 1904 [2] 714).
- $C_{25}H_{28}O_6N$  C 64,5 — H 4,9 — O 27,5 — N 3,0 — M. G. 465.
- 1) Dimethyläther d. 3-Nitrobenzylidendivanillin. Sm. 181—183° (*B.* 36, 3977 *C.* 1904 [1] 373).
- 2) Dimethyläther d. 4-Nitrobenzylidendivanillin. Sm. 186—188° (*B.* 36, 3975 *C.* 1904 [1] 373).
- $C_{25}H_{24}O_5N_2$  C 75,0 — H 6,0 — O 12,0 — H 7,0 — M. G. 400.
- 1) Verbindung (aus  $\epsilon$ -Keto- $\gamma\delta$ -Diphenylhexan- $\gamma\delta$ -Oxyd- $\beta$ -Carbonsäure). Sm. 212° u. Zers. (*Soc.* 83, 296 *C.* 1903 [1] 878).
- $C_{25}H_{24}O_5N_4$  C 70,1 — H 5,6 — O 11,2 — N 13,1 — M. G. 428.
- 1) Benzylidenhydrazid d.  $\alpha$ -Benzoylamidoacetylamo- $\beta$ -Phenylpropionsäure. Sm. 158° (*J. pr.* [2] 70, 228 *C.* 1904 [2] 1462).
- $C_{25}H_{24}O_4N_2$  3) 6-Methyläther-4,5-Methylenäther d. 4,5,6-Triox-2-[ $\beta$ -Methylbenzoylamidoäthyl]-1-Phenylimidomethylbenzol (Benzoylcotarnin-anil). Sm. 165° (*B.* 36, 1536 *C.* 1903 [2] 53).
- $C_{25}H_{24}O_4S_2$  1) 2,5-Diacetat d. 3,6-Dimerkapto-2,5-Dioxy-1-Methylbenzol-3,6-Dibenzyläther. Sm. 116—117° (*A.* 336, 165 *C.* 1904 [2] 1300).
- $C_{25}H_{25}O_5N_3$  2) 2,4',4''-Tri[Acetylamo]triphenylmethan (Triacetylparaleukanilin). Sm. 200—201° (*C.* 1904 [1] 460).
- $C_{25}H_{25}O_4N_3$  3)  $\alpha$ -Oxytri[4-Acetylamidophenyl]methan (Triacetylpararosanolin). Sm. 192° (*C.* 1904 [1] 461).
- $C_{25}H_{25}O_4N_5$  C 65,4 — H 5,4 — O 13,9 — N 15,3 — M. G. 459.
- 1) Di[Phenylamid] d.  $\alpha$ -Benzoylamidoacetylamoäthan- $\alpha$ -Carbonsäure- $\beta$ -Amidoameisensäure. Sm. 218—220° u. Zers. (*J. pr.* [2] 70, 180 *C.* 1904 [2] 1397).
- $C_{25}H_{25}O_6N$  C 69,0 — H 5,7 — O 22,1 — N 3,2 — M. G. 435.
- 1) Verbindung (aus Oxaleessigsäureäthylester, Benzaldehyd u. 2-Amidonaphthalin). Sm. 162° (*C. r.* 139, 298 *C.* 1904 [2] 713).
- $C_{25}H_{25}N_2Cl$  1) Chloräthylat d. 1-Aethyl-2,4,5-Triphenylimidazol (Ch. d. Aethyllophin). +  $AuCl_3$  (*A.* 122, 326). — III, 27; \*III, 19.
- $C_{25}H_{28}ON_2$  \*1)  $\alpha$ -Phenylimido- $\gamma$ -Benzoylphenylamido- $\beta$ -Methylpentan. Sm. 144° +  $C_2H_5O$  (*A.* 329, 212 *C.* 1903 [2] 1427).
- 5)  $\alpha$ -Benzoyl- $\alpha$ -[2,5-Dimethylbenzyl]- $\beta$ -[2,5-Dimethylbenzyliden]-hydrazin. Sm. 134—134,5° (*C.* 1903 [1] 141).
- 6) Aethylhydroxyd d. 1-Aethyl-2,4,5-Triphenylimidazol (Diäthyllophin). Salze siehe (*A.* 122, 326; *M.* 17, 304). — III, 27; \*III, 19.
- $C_{25}H_{26}O_5N_2$  3) 4,4'-Di[Acetylamo]-3,3'-Dimethyltriphenylmethan. Sm. 265 bis 266° (*C.* 1904 [2] 227).
- $C_{25}H_{26}O_6N_2$  C 66,7 — H 5,8 — O 21,3 — N 6,2 — M. G. 450.
- 1)  $\alpha\beta$ -Di[Phenylamidoformiat] d. i-3,4-Dioxy-1-[ $\alpha\beta$ -Dioxypropyl]-benzol-3,4-Dimethyläther. Sm. 166—168° (*B.* 36, 3582 *C.* 1903 [2] 1363).
- $C_{25}H_{27}ON_3$  C 77,9 — H 7,0 — O 4,2 — N 10,9 — M. G. 385.
- 1) Inn. Anhydrid d.  $\alpha$ -Oxy-2-Acetylamo-4',4''-Di[Dimethylamido]-triphenylmethan. Sm. 190—191° (*B.* 17, 1892; *B.* 36, 2784 *C.* 1903 [2] 881). — II, 1087.
- $C_{25}H_{28}O_4N_4$  C 67,0 — H 6,2 — O 14,3 — N 12,5 — M. G. 448.
- 1) Phenylhydrazon-Phenylbenzylhydrazon d. Glykose. Sm. 190° (*B.* 37, 2624 *C.* 1904 [2] 588).
- $C_{25}H_{29}ON_3$  \*1) 2'-Acetylamo-4<sup>2</sup>,4<sup>3</sup>-Di[Dimethylamido]triphenylmethan. Sm. 185 bis 186° (*B.* 36, 2785 *C.* 1903 [2] 881).
- $C_{25}H_{29}O_4P$  1) Amydinaphtylester d. Phosphorsäure (D.R.P. 142971 *C.* 1903 [2] 171).
- $C_{25}H_{29}O_6N$  C 70,9 — H 6,9 — O 18,9 — N 3,3 — M. G. 423.
- 1) Diäthylester d.  $\beta$ -Phenylamido- $\zeta$ -Keto- $\delta$ -Phenyl- $\beta$ -Hepten- $\gamma\epsilon$ -Dicarbonsäure. Sm. 150° (*B.* 36, 2187 *C.* 1903 [2] 569).

- $C_{25}H_{29}O_8N$  C 68,3 — H 6,6 — O 21,9 — N 3,2 — M. G. 439.  
 1) Aethyl ester d. Anhydrocrotarninbenzylacetessigsäure. Fl. HCl, (2HCl,  $PtCl_4$ ) (B. 37, 2748 C. 1904 [2] 545).  
 $C_{25}H_{30}ON_2$  3) Aethyläther d. 4', 4''-Di[Dimethylamido]-4-Oxytriphenylmethan. Sm. 125° (A. 329, 80 C. 1903 [2] 1441).  
 $C_{25}H_{30}O_5N_2$  5) Diäthylester d.  $\zeta$ -Phenylhydrazon- $\beta$ -Oxy- $\delta$ -Phenyl- $\beta$ -Hepten- $\gamma$ -Dicarbonsäure. Sm. 193° (B. 36, 2124 C. 1903 [2] 365).  
 $C_{25}H_{30}O_8N_4$  C 58,3 — H 5,8 — O 24,9 — N 10,9 — M. G. 514.  
 1) Triäthylester d. 2,5-Dimethylpyrrol-1-Semicarbazonbenzoylbrenztraubensäure-3,4-Dicarbonsäure. Sm. 134° (B. 36, 397 C. 1903 [1] 723).  
 $C_{25}H_{31}ON_3$  \*2)  $\alpha$ -Oxytri[4-Dimethylamidophenyl]methan (B. 36, 4297 C. 1904 [1] 379).  
 $C_{25}H_{31}O_8N$  2) Homonarceinmethylester. HCl (D.R.P. 71797). — \*II, 1219.  
 $C_{25}H_{32}ON_2$  3)  $\alpha\alpha$ [oder  $\alpha\beta$ ]-Di[1-Piperidyl]- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 156 bis 157°. HCl (Soc. 85, 1322 C. 1904 [2] 1645).  
 $C_{25}H_{32}O_8N_6$  C 60,5 — H 6,4 — O 16,1 — N 16,9 — M. G. 496.  
 1) s-Di[ $\beta$ -Benzoylamidoacetylamidopropyl]harnstoff. Sm. 157° (J. pr. [2] 70, 214 C. 1904 [2] 1460).  
 $C_{25}H_{41}O_2N$  1) Phenylamidoformiat d. Alkohol  $C_{18}H_{38}O$  (aus Oelsäure). Sm. 38° (C. r. 137, 328 C. 1903 [2] 710).  
 $C_{25}H_{41}O_9N$  C 60,1 — H 8,2 — O 28,9 — N 2,8 — M. G. 499.  
 1) Akonin (oder  $C_{25}H_{39}O_9N$ ). HCl + 2H<sub>2</sub>O (C. 1904 [2] 1239).  
 $C_{25}H_{43}N_3J_2$  1) Di[Jodisoamylat] d. Spartein. Sm. 230° (Ar. 242, 520 C. 1904 [2] 1413).

## — 25 IV —

- $C_{25}H_{17}O_2N_4Br$  1) Benzoat d. 3-Phenylazo-4-[4-Bromphenyl]azo-1-Oxybenzol. Sm. 175—176,5° (B. 36, 4116 C. 1904 [1] 272).  
 $C_{25}H_{19}O_4NS$  1)  $\alpha$ -Phenylsulfon-4-Nitrotriphenylmethan. Sm. 167—168° (B. 37, 608 C. 1904 [1] 887).  
 $C_{25}H_{20}O_5NP$  1) Triphenylester d. Phosphorsäurephenylmonamid-2-Carbonsäure. Sm. 94° (B. 36, 1827 C. 1903 [2] 201).  
 $C_{25}H_{29}O_{16}N_8S_2$  1) Verbindung + 7H<sub>2</sub>O (aus Taurin u. Phtalsäureanhydrid). Sm. 50° (C. 1903 [2] 986).  
 $C_{25}H_{31}O_2N_4Cl$  1) Mentylester d. 4-Chlorphenylazo-4-Methylphenylhydrazonessigsäure. Sm. 145—147° (Soc. 83, 1126 C. 1903 [2] 24, 791).  
 $C_{25}H_{31}O_2N_4Br$  1) Mentylester d. 4-Bromphenylazo-4-Methylphenylhydrazonessigsäure. Sm. 149—151° (Soc. 83, 1126 C. 1903 [2] 24, 791).  
 $C_{25}H_{38}O_2NBR_2$  1) N-Laurylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 50—51° (A. 332, 202 C. 1904 [2] 211).  
 $C_{25}H_{35}O_2N_2J$  1) Jodmethylester d. Piperidomethylmorphimethin. Sm. 248° (B. 36, 1594 C. 1903 [2] 54).  
 $C_{25}H_{38}O_2N_2J_2$  1) Di[Jodmethylester] d. Piperidocodid. Sm. 250° (B. 36, 1593 C. 1903 [2] 54).  
 $C_{25}H_{38}O_2N_2J_2$  1) Jodbenzylat d. Sparteinjodammoniumessigsäuremethylester. Sm. 219° (Ar. 242, 518 C. 1904 [2] 1412).  
 2) isom. Jodbenzylat d. Sparteinjodammoniumessigsäuremethylester. Sm. 245° (Ar. 242, 518 C. 1904 [2] 1412).  
 $C_{25}H_{37}N_3JP$  1) Methyltri[Diisobutylamido]phosphoniumjodid. Sm. 138° (A. 326, 170 C. 1903 [1] 762).

**C<sub>26</sub>-Gruppe.**

- $C_{26}H_{18}$  \*3) 9,10-Diphenylphenanthren. Sm. 233—234° (B. 37, 2900 C. 1904 [2] 1311).  
 4) 9,10-Diphenylanthracen. Sm. 240° (C. r. 138, 1252 C. 1904 [2] 118).  
 $C_{26}H_{20}$  7) isom. 9,10-Diphenyl-9,10-Dihydroanthracen. Sm. 218° (C. r. 138, 1253 C. 1904 [2] 118).  
 $C_{26}H_{22}$  \*1)  $\alpha\alpha\beta\beta$ -Tetraphenyläthan. Sm. 209° (J. pr. [2] 67, 128 C. 1903 [1] 872; J. pr. [2] 67, 183 C. 1903 [1] 875; B. 36, 2825 C. 1903 [2] 1128).  
 $C_{26}H_{42}$  2) Kohlenwasserstoff (aus Cholesterinphenylamidoformiat) oder  $C_{27}H_{44}$ . Sm. 75,5° (Bl. [3] 31, 72 C. 1904 [1] 578).

- $C_{28}H_{14}O_4$  C 80,0 — H 3,6 — O 16,4 — M. G. 390.  
 1) Di- $\beta$ -Naphthocumarin. Sm. oberh. 300° (B. 36, 1972 C. 1903 [2] 377).  
 $C_{28}H_{16}O_2$  3) Laktone d. Säure  $C_{28}H_{16}O_8$ . Sm. 213—219° (B. 29, 2155). — \*II, 1023.  
 $C_{28}H_{16}O_4$  2) Resorcinanthrachinon (B. 36, 2022 C. 1903 [2] 378).  
 $C_{28}H_{16}N_4$  3) Naphtofluorindin (B. 37, 3889 C. 1904 [2] 1654).  
 $C_{28}H_{16}Cl_4$  1) 10,10-Dichlor-9,9-Di[4-Chlorphenyl]-9,10-Dihydroanthracen. Sm. 158,5° (B. 37, 3618 C. 1904 [2] 1503).  
 $C_{28}H_{16}Br_4$  \*1) Tetra[4-Bromphenyl]äthen. Sm. 248° (Am. 30, 456 C. 1904 [1] 377).  
 $C_{28}H_{18}O$  \*2) 9-Benzoyl-9-Phenylfluoren. Sm. 172° (B. 37, 2898 C. 1904 [2] 1310).  
 6) 9,10-Anhydrid d. 9,10-Dioxy-9,10-Diphenyl-9,10-Dihydrophenanthren. Sm. 194—195° (B. 37, 2903 C. 1904 [2] 1311).  
 7) Verbindung (aus d. Verbindung  $C_{28}H_{18}O_2$ ). Sm. 157° (B. 29, 741). — \*II, 993.  
 $C_{28}H_{18}O_2$  \*1) 4,4'-Dibenzoylbiphenyl. Sm. 218° (A. 332, 79 C. 1904 [2] 43).  
 \*3) 2,2'-Dibenzoylbiphenyl. Sm. 165—167° (B. 37, 2899 C. 1904 [2] 1311).  
 4) Verbindung (aus d. Säure  $C_{27}H_{20}O_8$ ). Sm. 175° (B. 29, 740). — \*II, 993.  
 $C_{28}H_{18}O_8$  2) 10-Keto-9,9-Di[4-Oxyphenyl]-9,10-Dihydroanthracen. Sm. 308 bis 309° (B. 36, 2020 C. 1903 [2] 378; B. 37, 3616 C. 1904 [2] 1503).  
 3) Säure (aus d. Säure  $C_{26}H_{18}O_2$ ). Sm. 177—179° u. Zers. (B. 29, 2155). — \*II, 1023.  
 $C_{28}H_{18}O_4$  7) Dibenzoat d. 3,3'-Dioxybiphenyl. Sm. 92° (A. 332, 65 C. 1904 [2] 42).  
 $C_{28}H_{18}O_6$  2) 7-Acetoxy-3-Benzoyl-4-Methylen-2-Phenyl-1,4-Benzpyran-2-Carbonsäure. Sm. 148° (B. 37, 1969 C. 1904 [2] 231).  
 $C_{28}H_{18}N_4$  2) 3,8-Di[Benzylidenamido]-5,6-Naphtisodiazin. Sm. 210° (C. 1904 [1] 1614).  
 $C_{28}H_{18}Cl_2$  1) 9,10-Dichlor-9,10-Diphenyl-9,10-Dihydroanthracen. Sm. 178° u. Zers. (C. r. 138, 1252 C. 1904 [2] 118).  
 $C_{28}H_{18}Br_4$  1)  $\alpha\alpha\beta\beta$ -Tetra[4-Bromphenyl]äthan. Sm. oberh. 300° (Am. 30, 458 C. 1904 [1] 377).  
 $C_{28}H_{19}N_5$  C 77,8 — H 4,7 — N 17,5 — M. G. 401.  
 1) Amidonaphtyldiamidonaphtophenazin. 2HCl (B. 37, 3889 C. 1904 [2] 1654).  
 $C_{28}H_{20}O_2$  7) 9,10-Dioxy-9,10-Diphenyl-9,10-Dihydroanthracen. Sm. 242° (247°) (C. r. 138, 327 C. 1904 [1] 814; Bl. [3] 31, 798 C. 1904 [2] 529).  
 8) 9,10-Dioxy-9,10-Diphenyl-9,10-Dihydrophenanthren. Sm. 202—204° (B. 37, 2901 C. 1904 [2] 1311).  
 9) isom. 9,10-Dioxy-9,10-Diphenyl-9,10-Dihydrophenanthren. Sm. 178—179° (B. 37, 2903 C. 1904 [2] 1311).  
 $C_{28}H_{20}O_6$  \*2) Rhizocarpsäure (C. 1903 [2] 121).  
 $C_{28}H_{20}O_{11}$  C 61,4 — H 3,9 — O 34,6 — M. G. 508.  
 1) Pentaacetat d. Pentaoxybrasan. Sm. 268° (B. 36, 2200 C. 1903 [2] 381).  
 $C_{28}H_{20}O_{14}$  \*1) Hexaacetat d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm. 282 bis 283° (C. 1903 [1] 398).  
 $C_{28}H_{20}N_2$  \*4) 4,4'-Di[Benzylidenamido]biphenyl. Sm. 232—233° (234°) (Soc. 85, 1176 C. 1904 [2] 1215; B. 37, 3423 C. 1904 [2] 1295).  
 \*6) Di[Diphenylmethyl]hydrazin. Sm. 160—162° (B. 37, 3180 C. 1904 [2] 991).  
 13) 4,4'-Di[Phenylimidomethyl]biphenyl. Sm. 215° (A. 332, 75 C. 1904 [2] 43).  
 $C_{28}H_{22}O$  \*2) Benzhydroläther. Sm. 109° (B. 36, 2825 C. 1903 [2] 1128).  
 5) 4'-Oxy-4-Methyltetraphenylmethan. Sm. 201° (B. 37, 659 C. 1904 [1] 952).  
 $C_{28}H_{22}O_2$  \*2) Benzpinakon. Sm. 186° (B. 36, 1577 C. 1903 [1] 1397; C. r. 136, 694 C. 1903 [1] 967; J. pr. [2] 67, 191 C. 1903 [1] 875; B. 36, 2632 C. 1903 [2] 426; B. 37, 2761 C. 1904 [2] 707; C. r. 139, 480 C. 1904 [2] 1052).  
 5) Laktone d.  $\alpha$ -Oxy- $\alpha$ -[4-Isopropylphenyl]- $\beta\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\gamma$ -Carbonsäure. Sm. 143° (A. 333, 249 C. 1904 [2] 1391).

- $C_{26}H_{22}O_4$  6) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Benzoyl- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]propan- $\gamma$ -Carbonsäure. Sm. 140° (A. 333, 240 C. 1904 [2] 1390).  
7) isom. Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Benzoyl- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]propan- $\gamma$ -Carbonsäure. Sm. 126° (A. 333, 254 C. 1904 [2] 1391).
- $C_{26}H_{22}N_2$  11)  $\alpha$ -Diphenylmethyl- $\beta$ -Diphenylmethylenhydrazin. Sm. 91° (J. pr. [2] 67, 177 C. 1903 [1] 874).  
12) 4,4'-Di[4-Methylphenyl]azobenzol. Sm. 260° (C. 1904 [1] 1491).
- $C_{26}H_{22}N_4$  \*1) anti- $\alpha\beta$ -Di[Diphenylhydrazon]- $\alpha\beta$ -Diphenyläthan (B. 36, 62 C. 1903 [1] 451).  
\*3)  $\alpha\beta$ -Di[Benzylidenamido]- $\alpha\beta$ -Diphenylhydrazin. Sm. 187—187,5° (179—181°) (B. 36, 84 C. 1903 [1] 452; G. 33 [2] 54 C. 1903 [2] 1057).  
\*4) Dehydrobenzalphenylhydrazon. Sm. 203—205° (G. 33 [2] 55 C. 1903 [2] 1057).  
\*9) 4,4'-Di[Phenylhydrazonmethyl]biphenyl. Sm. 274° (A. 332, 76 C. 1904 [2] 43).
- $C_{26}H_{22}N_6$  2) 3,3'-Di[Phenylhydrazonmethyl]azobenzol. Sm. 255° (Bl. [3] 31, 453 C. 1904 [1] 1498).  
3) 4,4'-Di[Phenylhydrazonmethyl]azobenzol. Sm. 278,5° (Bl. [3] 31, 454 C. 1904 [1] 1498).
- $C_{26}H_{24}O_4$  1) 1,6'-Dimethyläther d. 4-Keto-1-Oxy-2-Phenyl-1,6-Di[4-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 207° (Am. 31, 152 C. 1904 [1] 807).  
C 78,0 — H 6,0 — O 16,0 — M. G. 400.
- $C_{26}H_{24}O_6$  C 75,0 — H 5,8 — O 19,2 — M. G. 416.  
1) 3<sup>s</sup>,3<sup>4</sup>-Dimethyläther-6-Aethyläther d. 6-Oxy-2-Phenyl-3-[3,4-Dioxybenzyliden]-2,3-Dihydro-1,4-Benzpyron. Sm. 145—146° (B. 37, 3170 C. 1904 [2] 1059).
- $C_{26}H_{24}O_8$  7) 3<sup>s</sup>,3<sup>4</sup>,7,8-Tetramethyläther d. 7,8-Dioxy-2-Phenyl-3-[3,4-Dioxybenzyliden]-2,3-Dihydro-1,4-Benzpyron. Sm. 196° (B. 37, 3171 C. 1904 [2] 1059).  
C 65,0 — H 5,0 — O 30,0 — M. G. 480.
- $C_{26}H_{24}O_9$  1) Tetraacetat d. Ononetin. Sm. 119—120° (M. 24, 142 C. 1903 [1] 1033).
- $C_{26}H_{24}N_2$  4)  $\alpha\beta$ -Di[Diphenylmethyl]hydrazin. Sm. 133°. HCl (J. pr. [2] 67, 180 C. 1903 [1] 875).  
5) Verbindung (aus 2-Methylindol u. 1-Methylbenzol-4-Carbonsäurealdehyd). Sm. 217—218° (B. 36, 4327 C. 1904 [1] 462).
- $C_{26}H_{24}N_4$  5) Verbindung (aus C-Acetylphenylhydroresorcin). Sm. 176—180° (B. 37, 3383 C. 1904 [2] 1219).
- $C_{26}H_{24}N_6$  2) 1,5-Diamido-2,4-Di[1-Amido-2-Naphtylamido]benzol. 4HCl (B. 37, 3889 C. 1904 [2] 1654).  
C 82,3 — H 6,6 — N 11,1 — M. G. 379.
- $C_{26}H_{25}N_8$  1)  $\alpha$ -Imido- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha$ -[4-p-Methylphenylamido-1-Naphtyl]methan. Sm. 164—165°. HCl (B. 37, 1907 C. 1904 [2] 116).
- $C_{26}H_{26}O_8$  3) Harz (aus Klebwachs). Sm. 66° (R. 22, 141 C. 1903 [2] 124).  
 $C_{26}H_{28}O_3$  C 80,4 — H 7,2 — O 12,4 — M. G. 388.
- 1) Methylester d. 4-Oxy-2-Methyl-5-Isopropyltriphenylessigmethyläthersäure. Sm. 145—146° (B. 37, 669 C. 1904 [1] 953).  
2) Methylester d. 4-Oxy-3-Methyl-6-Isopropyltriphenylessigmethyläthersäure. Sm. 137—138° (B. 37, 670 C. 1904 [1] 953).
- $C_{26}H_{28}O_6$  2) bim. o-Cumarallyläthersäure. Sm. 236° (B. 37, 1385 C. 1904 [1] 1344).  
 $C_{26}H_{28}O_{10}$  C 62,4 — H 5,6 — O 32,0 — M. G. 500.
- 1) Diacetat d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinontetraäthyläther. Sm. 230—235° (D.R.P. 151724 C. 1904 [1] 1587).  
C 80,0 — H 7,7 — O 12,3 — M. G. 390.
- $C_{26}H_{30}O_8$  1) Methyläther d.  $\alpha\delta$ -Diketo- $\alpha\beta\delta\delta$ -Tetraphenyl- $\gamma$ -[4-Oxyphenyl]pentan. Sm. 233—234° (B. 35, 3972 C. 1903 [1] 31).  
C 76,8 — H 7,4 — O 15,8 — M. G. 406.
- $C_{26}H_{30}O_4$  1) Menthylester d.  $\beta$ -Benzoxyl- $\alpha$ -Phenylakrylsäure. Fl. (Soc. 81, 1497 C. 1903 [1] 153).
- $C_{26}H_{30}O_8$  4) Eudesmin. Sm. 99° (C. 1897 [1] 170). — \*III, 497.  
5) Triäthylester d. Säure  $C_{20}H_{18}O_8$ . Sd. 195°<sub>12</sub> (M. 24, 85 C. 1903 [1] 769).

- $C_{26}H_{32}O_6$  C 70,9 — H 7,3 — O 21,8 — M. G. 440.  
 1) bim. o-Cumarpropyläthersäure. Sm. 254° (B. 37, 1385 C. 1904 [1] 1344).  
 2) bim. o-Cumarisopropyläthersäure. Sm. 264° (B. 37, 1385 C. 1904 [1] 1344).
- $C_{28}H_{32}O_7$  C 68,4 — H 7,0 — O 34,6 — M. G. 456.  
 1) Monoäthyläther d. Dihydroflavaspidsäurexanthen. Sm. 236° (A. 329, 317 C. 1904 [1] 799).  
 2) Globulariasäure. Sm. 228—230° u. Zers. (Ar. 241, 294 C. 1903 [2] 514). C 65,8 — H 7,2 — O 27,0 — M. G. 474.
- $C_{28}H_{34}O_8$  1) Dihydroflavaspidäthyläthersäure. Sm. 198—200° (A. 329, 319 C. 1904 [1] 799).  
 C 82,1 — H 9,5 — O 8,4 — M. G. 380.
- $C_{28}H_{36}O_2$  1) Benzoat d. Spongosterin. Sm. 128° (H. 41, 115 C. 1904 [1] 996).  
 $C_{28}H_{38}O_2$  2) Verbindung (aus *Asclepias syriaca* L.). Sm. 83—84° (J. pr. [2] 68, 413 C. 1904 [1] 105).
- $C_{28}H_{40}O$  \*1) Ergosterin. Sm. 154° (M. 25, 542 C. 1904 [2] 909).  
 $C_{28}H_{40}O_2$  2) Acetat d. Alstol. Sm. 200° (B. 37, 4112 C. 1904 [2] 1656).  
 $C_{28}H_{42}O$  \*1) Lupeol. Sm. 211—212° (213°) (H. 41, 474 C. 1904 [1] 1652; B. 37, 3442 C. 1904 [2] 1307; B. 37, 4105 C. 1904 [2] 1655).
- $C_{28}H_{48}Cl$  \*1) Cholesterylchlorid. Sm. 96° (B. 37, 3103 C. 1904 [2] 1535).  
 $C_{28}H_{44}O$  \*1) Cholesterin. Oxalat (M. 24, 663 C. 1903 [2] 1236).  
 \*5) Phytosterin. Sm. 132,5—133° (C. 1903 [2] 125; B. 36, 1053 C. 1903 [1] 1148).  
 11) Betasterin. Sm. 117° (B. 36, 975 C. 1903 [1] 1016).  
 12) Hefecholesterin +  $H_2O$ . Sm. 159° (H. 38, 12 C. 1903 [1] 1429).  
 13) Alkohol +  $\frac{1}{2}H_2O$  (aus Sesamöl) (G. 33 [2] 259 C. 1904 [1] 46).  
 14) Verbindung +  $H_2O$  (aus Olivenöl). Sm. 134° (wasserfrei) (C. 1903 [1] 93).
- $C_{28}H_{50}O_4$  2) Dilaürinat d.  $\alpha\beta$ -Dioxyäthan. Sm. 54°; Sd. 188° (B. 36, 4340 C. 1904 [1] 433).

## — 26 III —

- $C_{28}H_{15}O_8N$  C 80,2 — H 3,9 — O 12,3 — N 3,6 — M. G. 389.  
 1)  $\beta$ -Naphtolonaphthophenoxazon. Sm. oberh. 360° (B. 36, 1814 C. 1903 [2] 207).
- $C_{28}H_{16}O_6N_4$  2) 1,5-Di[4-Nitrophenylamido]-9,10-Anthrachinon (C. 1903 [1] 722).  
 $C_{28}H_{16}O_7N_6$  C 59,5 — H 3,0 — O 21,4 — N 16,0 — M. G. 524.  
 1) 5-Nitro-2-[4-Nitrophenyl]-1-[4-p-Nitrobenzoylamidophenyl]-benzimidazol. Sm. 299—300° (B. 37, 1073 C. 1904 [1] 1273).
- $C_{28}H_{16}N_2S$  1) Sulfid d. 5-Merkaptoakridin. Sm. 267° (J. pr. [2] 68, 85 C. 1903 [2] 446).  
 3) Hydrochinonphtaleinamid. Sm. 305° (B. 36, 2960 C. 1903 [2] 1006).  
 $C_{28}H_{17}O_4N$  C 71,7 — H 3,9 — O 14,7 — N 9,7 — M. G. 435.  
 $C_{28}H_{17}O_4N_3$  1) 4-[4-Nitrophenyl]-3,3'-Dioxy-2,2'-Binaphtyl (C. r. 138, 1618 C. 1904 [2] 338).
- $C_{28}H_{18}OBr_4$  1) Äther d. 4,4'-Dibrom- $\alpha$ -Oxydiphenylmethan. Sm. 155—156° (Am. 30, 460 C. 1904 [1] 377).
- $C_{28}H_{18}O_2N_2$  \*5) 3,3'-Dibenzoylazobenzol. Sm. 154—155° (C. 1903 [2] 112).  
 7) 1,5-Di[Phenylamido]-9,10-Anthrachinon. Sm. 180—190° (C. 1903 [1] 721).  
 8)  $\alpha\beta$ -Dibenzoyl- $\alpha\beta$ -Diphenylhydrazin. Sm. 161—162° (C. r. 136, 1554 C. 1903 [2] 359).
- $C_{28}H_{18}O_3N_2$  2) 2,4[oder 3,4]-Di[Phenylamido]-1-Oxy-9,10-Anthrachinon (D.R.P. 86150, 86539, 114199). — \*III, 300.  
 3) 3,3'-Dibenzoylazobenzol. Sm. 127° (C. 1903 [2] 112).
- $C_{28}H_{18}O_4N_2$  2) Dibenzoat d. 3,3'-Dioxyazobenzol. Sm. 129° (J. pr. [2] 67, 267 C. 1903 [1] 1221).
- $C_{28}H_{18}O_4N_6$  \*2) 3,6-Diphenyl-1,4-Di[4-Nitrophenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 305° (B. 36, 356 C. 1903 [1] 575).
- $C_{28}H_{19}O_4S_2$  1) Verbindung (aus 2,5-Dimerkapto-1,4-Diketohexahydrobenzoldibenzyläther). Sm. 119—121° (A. 336, 151 C. 1904 [2] 1300).
- $C_{28}H_{20}ON_2$  7)  $\alpha$ -Phenylimido- $\alpha$ -Phenylbenzoylamido- $\alpha$ -Phenylmethan. Sm. 171° (Am. 30, 36 C. 1903 [2] 363).

- $C_{26}H_{20}ON_2$  8) N-Benzyl-o-Methylchinophthalin. Sm. 208° (B. 36, 5919 C. 1904 [1] 98).
- $C_{26}H_{20}ON_4$  6) 3,3'-Di[Phenylimidomethyl]azoxybenzol. Sm. 125° (B. 36, 3471 C. 1903 [2] 1269).
- $C_{26}H_{20}O_2N_2$  \*3) 2,4'-Di[2-Oxybenzylidenamido]biphenyl. Sm. 151—152° (B. 36, 4090 C. 1904 [1] 269).
- \*5) 4,4'-Di[Benzoylamido]biphenyl. Sm. 352° (B. 36, 137 C. 1903 [1] 507).
- \*6) Phtalyl-1-Methylindol (B. 37, 1225 C. 1904 [1] 1272).
- 12) 3,3'-Di[Benzoylamido]biphenyl (C. 1903 [2] 112).
- 13) Indophthalon. Sm. 212°. HCl, K (B. 37, 1221 C. 1904 [1] 1272).
- $C_{26}H_{20}O_4N_2$  5) Phenylhydrazon d. Verb.  $C_{20}H_{14}O_6$ . Sm. 232° (B. 36, 3233 C. 1903 [2] 941).
- $C_{26}H_{20}O_4N_6$  \*1) Di-3-Nitrobenzaldiphenylhydrotetrazon. Sm. 166° (B. 36, 94 C. 1903 [1] 453; G. 34 [2] 278 C. 1904 [2] 1387).
- \*2) Dehydro-3-Nitrobenzalphenylhydrazon. Sm. 216—217° (B. 36, 95 C. 1903 [1] 453; G. 34 [2] 279 C. 1904 [2] 1387).
- \*3) isom. Dehydro-3-Nitrobenzalphenylhydrazon. Sm. 265° (B. 36, 97 C. 1903 [1] 453; G. 34 [2] 280 C. 1904 [2] 1387).
- 5)  $\alpha$ -[Benzyliden]- $\beta$ -[4-Nitrophenyl]- $\beta$ -[ $\alpha$ -4-Nitrophenylhydrazonbenzyl]hydrazin. Sm. 238° (B. 36, 354 C. 1903 [1] 575).
- 6) 4,6-Dinitro-1,3-Di[1-Amido-2-Naphtylamido]benzol. Sm. 300° (B. 37, 3888 C. 1904 [2] 1654).
- 7) isom. Verbindung (aus 3-Nitrobenzaldehydphenylhydrazon). Sm. 212 bis 213° (B. 36, 96 C. 1903 [1] 453).
- $C_{26}H_{20}N_2S$  1) Verbindung (aus Benzanilidchlorid u. Natriumthiobenzanilid). Sm. 202 bis 204° (C. 1904 [1] 1003).
- $C_{26}H_{20}N_4S$  \*1) 2,5-Diphenylimido-3,4-Diphenyltetrahydro-1,3,4-Thiodiazol. Sm. 135—136° (B. 36, 3131 C. 1903 [2] 1070).
- $C_{26}H_{21}ON$  3) 2-Oxy-1- $\alpha$ -Cinnamylamidobenzyl]naphtalin. Sm. 174° (G. 33 [1] 33 C. 1903 [1] 926).
- 4)  $\varepsilon$ -Keto- $\varepsilon$ -[4-Cinnamylidenamidophenyl]- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadiën. Sm. 191° (B. 37, 394 C. 1904 [1] 657).
- $C_{26}H_{21}ON_3$  3)  $\alpha$ -Phenylimido- $\alpha$ -[ $\beta$ -Benzoyl- $\alpha$ -Phenylhydrazido]- $\alpha$ -Phenylmethan. Sm. 136° (Am. 31, 583 C. 1904 [2] 109).
- 4)  $\alpha$ -Nitroso- $\alpha$ -Diphenylmethyl- $\alpha$ -Diphenylmethylenhydrazin. Sm. 80 bis 81° u. Zers. (J. pr. [2] 67, 178 C. 1903 [1] 874).
- 5) 3'-Amido-2'-Methyl-9-[4-Amidophenyl]-1,2-Naphtakridin. Sm. 313°. HCl, HNO<sub>3</sub> (C. 1903 [1] 883).
- $C_{26}H_{22}ON_2$  5) Methyläther d.  $\alpha$ -Phenylazo-4-Oxytriphenylmethan. Sm. 115° (B. 36, 2790 C. 1903 [2] 882).
- 6) Methyläther d.  $\alpha$ -[2-Oxyphenyl]imido- $\alpha$ -Diphenylamido- $\alpha$ -Phenylmethan. Pikrat (B. 37, 2684 C. 1904 [2] 521).
- $C_{26}H_{22}ON_6$  2) 3,3'-Di[Phenylhydrazonmethyl]azoxybenzol. Sm. 198° (Am. 28, 480 C. 1903 [1] 328; B. 36, 3471 C. 1903 [2] 1269).
- $C_{26}H_{22}O_2N_2$  9) 3,4-Methylenäther d.  $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\alpha$ -Di[2-Methyl-3-Indolyl]methan. Sm. 213° (B. 36, 4329 C. 1904 [1] 463; B. 37, 323 C. 1904 [1] 668).
- $C_{26}H_{22}O_3N_4$  6) Monoäthyläther d. 4,4'-Di[4-Oxyphenylazo]biphenyl. Sm. 272° (B. 36, 2974 C. 1903 [2] 1031).
- $C_{26}H_{22}O_3N_2$  3) Anhydrophenylhydrazondiphenylketoktolaktonsäure. Sm. 50° (A. 334, 137 C. 1904 [2] 890).
- $C_{26}H_{22}O_3S$  1) Methyläther d.  $\alpha$ -Phenylsulfon-4-Oxytriphenylmethan. Sm. 165 bis 166° (B. 36, 2791 C. 1903 [2] 882).
- $C_{26}H_{22}O_5N_2$  4) Phenylhydrazon d. Verb.  $C_{20}H_{16}O_8$ . Sm. 241° (B. 36, 3232 C. 1903 [2] 941).
- $C_{26}H_{22}O_6S_2$  1) Di[4-Methylbenzolsulfonat] d. 2,2'-Dioxybiphenyl. Sm. 171° (A. 332, 63 C. 1904 [2] 42).
- $C_{26}H_{22}N_2Cl_2$  2) 1,3-Xylylendicholiniumchlorid. 2 + PtCl<sub>4</sub> (B. 36, 1680 C. 1903 [2] 29).
- $C_{26}H_{22}N_2Br_2$  1) 1,3-Xylylendicholiniumbromid. Sm. 276° u. Zers. + Br<sub>4</sub> (B. 36, 1680 C. 1903 [2] 29).
- 2) 1,4-Xylylendicholiniumbromid. Sm. 306°. + Br<sub>4</sub> (B. 34, 2090).
- $C_{26}H_{22}N_4S_2$  1) 2,4'-Di[ $\beta$ -Phenylthioureido]biphenyl. Sm. 164° (B. 36, 4093 C. 1904 [1] 270).

- $C_{20}H_{23}ON$  2) Methyläther d.  $\alpha$ -Oxy-4-Phenylamidotriphenylmethan. Sm. 127° (B. 37, 612 C. 1904 [1] 888).
- 3) Methyläther d.  $\alpha$ -Phenylamido-4-Oxytriphenylmethan. Sm. 138 bis 139° (B. 37, 608 C. 1904 [1] 887).
- $C_{26}H_{23}ON_3$  2)  $\alpha$ -Nitroso- $\alpha$ - $\beta$ -Di[Diphenylmethyl]hydrazin. Sm. 135° u. Zers. (J. pr. [2] 67, 186 C. 1903 [1] 875).
- 3) Leukobase d. 3'-Amido-2'-Methyl-9-[4-Acetylamidophenyl]-1,2-Naphtakridin (C. 1903 [1] 883).
- $C_{26}H_{24}ON_2$  3) 4-Dimethylamidophenyl-4-[4-Methylphenyl]amido-1-Naphtylketon. Sm. 219° (221°) (D.R.P. 79390; B. 37, 1902 C. 1904 [2] 115). — \*III, 195.
- 4) 4-Dimethylamidophenyl-9-[4-Methylphenyl]amidonaphtylketon. Sm. 121° (C. 1903 [1] 87).
- 5) Verbindung (aus 2-Methylindol u. 4-Methoxybenzaldehyd). Sm. 211 bis 212° (B. 36, 4328 C. 1904 [1] 462).
- $C_{26}H_{24}O_2N_2$  8) 1,3-Xylylendichinoliniumhydroxyd. 2 Chlorid +  $PtCl_4$ , 2 Bromid +  $Br_4$ , 2 Pikrat (B. 36, 1680 C. 1903 [2] 29).
- $C_{26}H_{24}O_3N_2$  2) Diäthylester d.  $\alpha\delta$ -Di[Phtalylamido]butan- $\alpha\alpha$ -Dicarbonsäure. Sm. 125° (C. 1903 [2] 34).
- $C_{26}H_{24}O_{10}N_2$  C 59,5 — H 4,6 — O 30,5 — N 5,3 — M. G. 524.
- 1) Diäthylester d. Oxalyldi[4-Amidobenzoylbrenztraubensäure]. Sm. 151° (B. 36, 2699 C. 1903 [2] 952).
- $C_{26}H_{26}O_5N$  2) Triäthyläther d. Hydrochinonphtalein- $\alpha$ -Oxim. Sm. 158—159° (B. 36, 2962 C. 1903 [2] 1006).
- $C_{26}H_{26}O_8N_2$  2) Salicylat d. Cinchonidin. Sm. 65—70° (D.R.R. 137207 C. 1903 [1] 110).
- $C_{26}H_{26}O_4N_6$  \*1) 1,4-Di[2,5-Diacetyldiamidophenyl]-1,4-Azophenylen (B. 37, 2908 C. 1904 [2] 1458).
- $C_{26}H_{26}O_6N_2$  2) Diäthylester d. 1-Dibenzoylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 132—133° (B. 35, 4315 C. 1903 [1] 336).
- $C_{26}H_{26}O_8N_4$  C 59,8 — H 5,0 — O 24,5 — N 10,7 — M. G. 522.
- 1) Diäthylester d. Dibenzoylbisdiazoacetessigsäure. Sm. 150° (G. 34 [1] 191 C. 1904 [1] 1333).
- $C_{26}H_{27}O_4N$  5) Triäthyläther d. Phenolphtaleinoxim. Sm. 142—143° (B. 36, 2966 C. 1903 [2] 1007).
- $C_{26}H_{27}O_7N_3$  C 63,3 — H 5,5 — O 22,7 — N 8,5 — M. G. 493.
- 1) Salipyrinorthoform. Sm. 76° (A. 325, 318 C. 1903 [1] 770).
- 2) isom. Salipyrinorthoform. Sm. 75—77° (A. 325, 319 C. 1903 [1] 770).
- $C_{26}H_{28}O_3N_2$  C 75,0 — H 6,7 — O 11,5 — N 6,7 — M. G. 416.
- 1)  $\alpha$ ,2-Lakton d. 4',4''-Di[Dimethylamido]- $\alpha$ ,4-Dioxytriphenylmethan-4-Aethyläther-2-Carbonsäure. Sm. 167—168° (A. 329, 76 C. 1903 [2] 1440).
- $C_{26}H_{28}O_5S_2$  1)  $\varepsilon$ -Keto- $\alpha\gamma$ -Dibenzylsulfon- $\alpha$ -Phenylhexan. Sm. 265° (B. 37, 509 C. 1904 [1] 884).
- $C_{26}H_{29}O_2N_3$  4) Aethyläther d. 5-Oxy-3-Keto-1,1-Di[4-Dimethylamidophenyl]-2,3-Dihydropseudoisindol. Sm. 242—244° (A. 329, 77 C. 1903 [2] 1440).
- 5) Inn. Anhydrid d.  $\alpha$ -Oxy-4',4''-Di[Dimethylamido]triphenylmethan-2-Amidoameisensäureäthylester. Sm. 172—174° (B. 36, 2786 C. 1903 [2] 881).
- $C_{26}H_{30}O_3N_2$  2) 4',4''-Di[Dimethylamido]-4-Oxytriphenylmethan-4-Aethyläther-2-Carbonsäure. Sm. 197—198° (A. 329, 73 C. 1903 [2] 1440).
- $C_{26}H_{30}O_6S_3$  1)  $\beta\beta\delta$ -Tribenzylsulfonpentan. Sm. 187—188° (B. 37, 505 C. 1904 [1] 882).
- $C_{26}H_{31}O_2N_3$  2) Aethylester d. 4',4''-Di[Dimethylamido]triphenylmethan-2-Amidoameisensäure. Sm. 131—132° (u. 149°) (B. 36, 2785 C. 1903 [2] 881).
- 3) Amid d. 4',4''-Di[Dimethylamido]-4-Oxytriphenylmethan-4-Aethyläther-2-Carbonsäure. Sm. 191—192° (A. 329, 74 C. 1903 [2] 1440).
- $C_{26}H_{31}O_4N$  2) 1-Menthylester d.  $\beta$ -Phenylamidoformoxyl- $\alpha$ -Phenylakrylsäure. Sm. 235—237° (Soc. 81, 1498 C. 1903 [1] 153). — \*III, 335.
- $C_{26}H_{33}O_8N_6$  C 59,5 — H 6,1 — O 18,3 — N 16,0 — M. G. 524.
- 1) s-Di[ $\beta$ -Benzoylamidoacetylamidobutyl]hydrazin. Sm. 264° (J. pr. [2] 70, 210 C. 1904 [2] 1460).
- $C_{26}H_{33}O_8N_2$  2) Tetraäthylester d. Biphenyl-4,4'-Di[Amidomalonsäure]. Sm. 138° (C. 1903 [1] 35).

- $C_{26}H_{33}ON_3$  \*3) Methyläther d.  $\alpha$ -Oxytri[4-Dimethylamidophenyl]methan. Sm. 159 bis  $160^\circ$  (B. 37, 2875 C. 1904 [2] 778).  
 $C_{26}H_{33}O_3N$  C 64,0 — H 6,8 — O 26,3 — N 2,9 — M. G. 487.  
 $C_{26}H_{34}O_2N_4$  1) Homonarceinäthylester. HCl (D.R.P. 71797). — \*II, 1219.  
 C 71,9 — H 7,8 — O 7,4 — N 12,9 — M. G. 434.  
 1) Mentylester d. 4-Methylphenylazo-4-Methylphenylhydrazon-essigsäure. Sm.  $134-136^\circ$  (Soc. 83, 1125 C. 1903 [2] 24, 791).  
 $C_{26}H_{36}O_3N_2$  C 73,6 — H 8,5 — O 11,3 — N 6,6 — M. G. 424.  
 1) Dipropylderivat d. Yohimboasäure. Sm.  $135-136^\circ$  (B. 37, 1764 C. 1904 [1] 1527).  
 $C_{26}H_{37}O_3N$  2) Diäthyläther d. N-Acetyl-di[4-Oxy-2-Methyl-5-Isopropylphenyl]-amin. Sm.  $89-90^\circ$  (B. 36, 2888 C. 1903 [2] 875).  
 $C_{26}H_{41}ON$  C 81,5 — H 10,7 — O 4,2 — N 3,6 — M. G. 383.  
 1) Verbindung (aus Lupeol) oder  $C_{27}H_{41}ON$ . Sm.  $226^\circ$  (B. 37, 4108 C. 1904 [2] 1655).  
 $C_{26}H_{42}OBr_2$  1) Lupeoldibromid. Sm.  $154^\circ$  (B. 37, 4107 C. 1904 [2] 1655).  
 $C_{26}H_{49}O_6N$  \*1) Glykocholsäure (C. 1903 [2] 1242).  
 $C_{26}H_{50}N_2Cl_2$  2) Di[Chlormethylat] d. 1,3-Di[Dipropylamidomethyl]benzol. 2 +  $PtCl_4$  (B. 36, 1678 C. 1903 [2] 29).  
 $C_{26}H_{50}N_2Br_2$  2) Di[Brompropylat] d. 1,3-Di[Dipropylamidomethyl]benzol. Sm.  $226^\circ$ . +  $Br_4$  (B. 36, 1677 C. 1903 [2] 29).  
 $C_{26}H_{52}O_2N_2$  2) Di[Propyloxyhydrat] d. 1,3-Di[Dipropylamidomethyl]benzol. 2 Chlorid +  $PtCl_4$ , Bromid, Pikrat (B. 36, 1678 C. 1903 [2] 29).

## — 26 IV —

- $C_{26}H_{18}O_3NCl$  1) 6-Chlor-3-Phenylamidofluoran. Sm.  $211^\circ$  (D.R.P. 85885). — \*III, 574.  
 $C_{26}H_{18}O_{10}N_2S_2$  1) Diphenylester d. cis- $\alpha\beta$ -Di[4-Nitrophenyl]äthan-2,2'-Disulfonsäure. Sm.  $172^\circ$  (Soc. 85, 1434 C. 1904 [2] 1740).  
 2) Diphenylester d. trans- $\alpha\beta$ -Di[4-Nitrophenyl]äthan-2,2'-Disulfonsäure. Sm.  $192-192,5^\circ$  (Soc. 85, 1434 C. 1904 [2] 1740).  
 $C_{26}H_{19}O_4NS_2$  1) 9-Diphenylsulfonamidophenanthren. Sm.  $263-264^\circ$  (B. 36, 2516 C. 1903 [2] 507).  
 $C_{26}H_{20}O_3N_2Cl_4$  1)  $\alpha\beta$ -Di[Phenylamido]- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm.  $153^\circ$  u. Zers. (A. 325, 64 C. 1903 [1] 462).  
 $C_{26}H_{20}O_3N_2S_2$  1) Disulfid d. Diphenylamidothiolsäure. Sm.  $195-196^\circ$  (B. 36, 2273 C. 1903 [2] 563).  
 $C_{26}H_{21}O_5N_3S$  1) Phenylamid d.  $\alpha$ -Phenylsulfon- $\alpha$ -[4-Benzoxylphenyl]hydrazin- $\beta$ -Carbonsäure. Sm.  $140^\circ$  (A. 334, 189 C. 1904 [2] 835).  
 $C_{26}H_{21}O_6N_3S_2$  1) Di[2-Naphtylsulfon]histidin. Sm.  $149-150^\circ$  (H. 42, 516 C. 1904 [2] 1290).  
 $C_{26}H_{22}O_3N_2Cl_4$  1) 3-Dimethylamido-6-Diäthylamido-9<sup>a</sup>,9<sup>b</sup>,9<sup>c</sup>,9<sup>d</sup>-Tetrachlorfluoran. HCl (Bl. [3] 25, 747). — \*III, 576.  
 $C_{26}H_{23}N_3JS$  1) Äthyläther d. 5-Jod-3-Merkapto-1,5-Diphenyl-4-[1-Naphtyl]-4,5-Dihydro-1,2,4-Triazol. Sm.  $278^\circ$  (J. pr. [2] 67, 245 C. 1903 [1] 1264).  
 2) Äthyläther d. 5-Jod-3-Merkapto-1,5-Diphenyl-4-[2-Naphtyl]-4,5-Dihydro-1,2,4-Triazol. Sm.  $208^\circ$  (J. pr. [2] 67, 245 C. 1903 [1] 1264).  
 $C_{26}H_{28}O_4N_2Br_3$  1) Acetat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[Acetylphenylamidomethyl]benzol. Sm.  $145^\circ$  (B. 37, 3907 C. 1904 [2] 1592).  
 $C_{26}H_{24}O_3N_4S_2$  1) Phenylhydrazid d.  $\alpha$ -[1-Naphtylthiosulfon]- $\beta$ -Phenylhydrazon-buttersäure. Sm.  $139-140^\circ$  (J. pr. [2] 70, 385 C. 1904 [2] 1720).  
 2) Phenylhydrazid d.  $\alpha$ -[2-Naphtylthiosulfon]- $\beta$ -Phenylhydrazon-buttersäure. Sm.  $156-157^\circ$  (J. pr. [2] 70, 385 C. 1904 [2] 1720).  
 $C_{26}H_{24}O_4N_2S_2$  \*1) 4,4'-Di[Methylphenylsulfonamid]biphenyl. Sm.  $189-190^\circ$  (B. 37, 3772 Ann. C. 1904 [2] 1547).  
 3) Di[Methylphenylamid] d. Biphenyl-4,4'-Disulfonsäure. Sm.  $187^\circ$  (A. 332, 59 C. 1904 [2] 41).  
 4) 4,4'-Di[4-Methylphenylsulfonamid]biphenyl. Sm.  $243^\circ$  (B. 37, 3772 C. 1904 [2] 1547).  
 $C_{26}H_{34}O_3N_2S_4$  1) Di[2-Naphtylsulfon]cystin. Sm.  $214^\circ$  (H. 38, 558 C. 1903 [2] 390).  
 $C_{26}H_{24}O_5N_4S_2$  1) Säure (aus Diamingoldgelb).  $Na_2$  (B. 36, 2977 C. 1903 [2] 1031).

- $C_{26}H_{25}O_3N_2Br_3$  1) 1,3-Diacetylderivat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[4-Methylphenylamidomethyl]benzol. Sm. unter  $100^\circ$  (B. 37, 3911 C. 1904 [2] 1593).  
 2) 3,4-Diacetylderivat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[2-Methylphenylamidomethyl]benzol. Sm.  $193^\circ$  (B. 37, 3912 C. 1904 [2] 1593).  
 3) 3,4-Diacetylderivat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[4-Methylphenylamidomethyl]benzol. Sm.  $187-188^\circ$  (B. 37, 3911 C. 1904 [2] 1593).  
 $C_{26}H_{26}O_4N_2Cl_2$  1) *p*-Dichlor-1-[*p*-Dimethylamido-*p*-Oxybenzoyl]-2-[*p*-Diäthylamido-3-Oxybenzoyl]benzol (Bl. [3] 29, 61 C. 1903 [1] 456).  
 $C_{26}H_{28}O_5N_2S$  1) Laurotetaninphenylthioharnstoff. Sm.  $211-212^\circ$  (Ar. 236, 616). — \*III, 661.  
 $C_{26}H_{28}O_2N_2J_2$  1) Di[Jodmethylat] d. Piperidomethylmorphimethin (B. 36, 1594 C. 1903 [2] 54).  
 $C_{26}H_{45}O_7NS$  \*1) Taurocholsäure +  $H_2O$ . Zers. bei  $100^\circ$  (H. 43, 127).

## — 26 V —

- $C_{26}H_{19}O_3NBrP$  1) 3-Bromphenylmonamid d. Phosphorsäuredi[2-Naphtylester]. Sm.  $166,5^\circ$  (A. 326, 234 C. 1903 [1] 867).

**C<sub>27</sub>-Gruppe.**

- $C_{27}H_{42}$  \*4)  $\alpha$ -Cholesteron. Sm.  $79^\circ$  (M. 24, 666 C. 1903 [2] 1236).  
 6) isom. Cholesterilen. Sd.  $280-300^\circ_{55}$  (M. 24, 661 C. 1903 [2] 1236).  
 $C_{27}H_{46}$  2) Verbindung (aus Guttapercha). Sd.  $320-360^\circ_{20}$  (C. 1903 [1] 83).

## — 27 II —

- $C_{27}H_{12}O_9$  C 67,5 — H 2,5 — O 30,0 — M. G. 480.  
 $C_{27}H_{16}O_8$  1) Tridioxybenzoylenbenzol (B. 33, 2440, 3085). — \*III, 245.  
 C 83,5 — H 4,1 — O 12,4 — M. G. 388.  
 $C_{27}H_{17}N$  1) Cinnamylidenbiindon. Sm.  $243^\circ$  (B. 34, 3270). — \*III, 245.  
 \*1) 9-Phenyl-1,2,1',2'-Dinaphtakridin. Sm.  $297^\circ$  (B. 36, 592 C. 1903 [1] 724; B. 36, 1030 C. 1903 [1] 1269).  
 2) 9-Phenyl-1,2,2',1'-Dinaphtakridin. Sm.  $254^\circ$ . HBr,  $HNO_3$  (B. 36, 1031 C. 1903 [1] 1270).  
 $C_{27}H_{18}O$  \*1) Anhydrid d. Phenylidi[2-Oxynaphtyl]methan. Sm.  $190-191^\circ$  (G. 33 [1] 26 C. 1903 [1] 926; Soc. 85, 793 C. 1904 [2] 227, 529).  
 $C_{27}H_{18}O_2$  3) Verbindung (aus 4-Oxybenzaldehyd u.  $\beta$ -Naphtol). (Phenyloldinaphtopyran). Sm.  $207^\circ$  (C. r. 137, 859 C. 1904 [1] 103).  
 $C_{27}H_{19}N$  C 90,8 — H 5,3 — N 3,9 — M. G. 357.  
 1) 9-Phenylidihydro-1,2,1',2'-Dinaphtakridin. Sm.  $230^\circ$  (B. 36, 591 C. 1903 [1] 724; B. 36, 1029 C. 1903 [1] 1270).  
 2) 9-Phenylidihydro-1,2,2',1'-Dinaphtakridin. Sm.  $240^\circ$  (B. 36, 1030 C. 1903 [1] 1270).  
 $C_{27}H_{20}O_3$  3) Säure (aus  $\alpha$ -Oxydiphenylessigsäure). Ag (B. 29, 740). — \*II, 993.  
 $C_{27}H_{20}O_{10}$  C 64,3 — H 4,0 — O 31,7 — M. G. 504.  
 1) Tetraacetat d. 2,3,7-Trioxy-9-[2-Oxyphenyl]fluoron. Sm. 223 bis  $224^\circ$  (B. 37, 2734 C. 1904 [2] 542).  
 2) Tetraacetat d. 2,3,7-Trioxy-2-[4-Oxyphenyl]fluoron. Sm. 242 bis  $243^\circ$  (B. 37, 2734 C. 1904 [2] 542).  
 $C_{27}H_{22}O_2$  2) Monomethyläther d. 9,10-Dioxy-9,10-Diphenyl-9,10-Dihydroanthracen. Sm.  $274^\circ$  (C. r. 138, 1252 C. 1904 [2] 118).  
 3) Acetat d. 4-Oxytetraphenylmethan. Sm.  $175^\circ$  (B. 37, 661 C. 1904 [1] 952).  
 $C_{27}H_{22}O_3$  C 82,2 — H 5,6 — O 12,2 — M. G. 394.  
 1) 4-Keto-1-Acetyl-3-Benzoyl-2,6-Diphenyl-1,2,3,4-Tetrahydrobenzol. Sm.  $183^\circ$  (B. 36, 2132 C. 1903 [2] 366).  
 2) Anhydrid d.  $\alpha\alpha$ -Diphenyl- $\delta$ -[4-Isopropylphenyl]- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm.  $139-140^\circ$  (B. 37, 2662 C. 1904 [2] 523).

- $C_{27}H_{22}O_3$  3) 5-Acetat d. 5-Oxy-1,2-Diphenyl-3-[4-Oxyphenyl]benzol-3'-Methyl-äther. Sm. 141—142° (*Am.* 31, 147 *C.* 1904 [1] 806).  
 $C_{27}H_{23}N$  1) 9-Phenyl-9-[4-Dimethylamidophenyl]fluoren. Sm. 141,5° (*B.* 37, 76 *C.* 1904 [1] 519).  
 2) 9-[4-Methylamido-3-Methylphenyl]-9-Phenylfluoren. Sm. 190,5°. HCl (*B.* 37, 77 *C.* 1904 [1] 519).  
 $C_{27}H_{24}O$  2)  $\alpha$ -Oxy- $\alpha\alpha\gamma\gamma$ -Tetraphenylpropan. Sm. 95—96° (*Am.* 31, 651 *C.* 1904 [2] 446).  
 3) 5-Oxy-1,2-Diphenyl-3-[4-Isopropylphenyl]benzol. Sm. 155° (*Am.* 31, 146 *C.* 1904 [1] 806).  
 $C_{27}H_{24}O_4$  C 78,6 — H 5,8 — O 15,5 — M. G. 412.  
 1) lab.  $\gamma$ s-Dibenzoyl- $\beta\zeta$ -Diketo- $\delta$ -Phenylheptan. Sm. 121° (*B.* 36, 2131 *C.* 1903 [2] 366).  
 2) stab.  $\gamma$ s-Dibenzoyl- $\beta\zeta$ -Diketo- $\delta$ -Phenylheptan. Sm. 195° (*B.* 36, 2131 *C.* 1903 [2] 366).  
 3)  $\alpha\alpha$ -Diphenyl- $\delta$ -[4-Isopropylphenyl]- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm. 229° u. Zers.  $Na_2 + 3H_2O$  (*B.* 37, 2661 *C.* 1904 [2] 523).  
 $C_{27}H_{24}O_9$  2) Tribenzoat d. Chitose. Sm. 116° (*B.* 35, 4022 *C.* 1903 [1] 391).  
 $C_{27}H_{24}O_{13}$  C 58,3 — H 4,3 — O 37,4 — M. G. 556.  
 1) Alektorinsäure +  $2H_2O$ . Sm. 220° wasserfrei (*J. pr.* [2] 68, 17 *C.* 1903 [2] 511).  
 $C_{27}H_{24}N_2$  6)  $\gamma$ -Phenylhydrazon- $\alpha\alpha\gamma$ -Triphenylpropan. Sm. 137° (*Am.* 31, 650 *C.* 1904 [2] 446).  
 7) Verbindung (aus 2-Methylindol u. Zimmtaldehyd). Sm. 206° (*B.* 36, 4329 *C.* 1904 [1] 462).  
 $C_{27}H_{26}O_2$  C 84,8 — H 6,8 — O 8,4 — M. G. 382.  
 1) 1-Oxy-4-Keto-1,6-Diphenyl-2-[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 231° (*Am.* 31, 144 *C.* 1904 [1] 806).  
 $C_{27}H_{26}O_8$  \*3) Tribenzyliden-d-Mannit. Sm. 213—214° (*B.* 37, 299 *C.* 1904 [1] 647).  
 $C_{27}H_{29}N$  3) Di[4-Dimethylamidophenyl]-4-Amido-1-Naphtylmethan. Sm. 221 bis 222° (*C.* 1903 [1] 87; *B.* 37, 1908 *C.* 1904 [2] 115).  
 $C_{27}H_{30}O_{12}$  C 59,3 — H 5,5 — O 35,2 — M. G. 546.  
 1) Verbindung (aus Lariciresinol). Sm. 140—141° (*M.* 24, 210 *C.* 1903 [2] 38).  
 $C_{27}H_{30}O_{15}$  2) Oxyapiinmethyläther (*B.* 33, 2337; *A.* 318, 136). — \*III, 431.  
 $C_{27}H_{30}O_{16}$  C 53,1 — H 4,9 — O 42,0 — M. G. 610.  
 1) Globulariacitrin. Sm. 190° u. Zers. (*Ar.* 241, 297 *C.* 1903 [2] 515).  
 2) Rutin +  $2H_2O$  (Sophorin). Sm. 188—190° (*Ar.* 242, 212 *C.* 1904 [1] 1651; *Ar.* 242, 225 *C.* 1904 [1] 1651; *Ar.* 242, 547 *C.* 1904 [2] 1405; *Ar.* 242, 556 *C.* 1904 [2] 1405).  
 $C_{27}H_{30}N_4$  C 79,0 — H 7,3 — N 13,7 — M. G. 410.  
 1) Di[4-Dimethylamidophenyl]-3,4-Diamido-1-Naphtylmethan. Sm. 233—234° (*C.* 1903 [1] 88; *B.* 37, 1909 *C.* 1904 [2] 115).  
 $C_{27}H_{30}N_6$  C 74,0 — H 6,8 — N 19,2 — M. G. 438.  
 1) 2,4,6-Tri[4-Dimethylamidophenyl]-1,3,5-Triazin. Sm. 357° (*B.* 37, 1738 *C.* 1904 [1] 1599).  
 $C_{27}H_{32}O$  C 87,1 — H 8,6 — O 4,3 — M. G. 372.  
 1) 3-Keto-2,4-Di[4-Isopropylphenyl]-1-Methylhexahydrobenzol. Sd. 300°<sub>10</sub> (*C. r.* 136, 116).  
 $C_{27}H_{33}N_5$  C 75,9 — H 7,7 — N 16,4 — M. G. 427.  
 1) 4, 4', 4''-Tri[Dimethylamido]hydrobenzamid. Sm. 193°. 3HCl, Pikrat (*B.* 37, 1736 *C.* 1904 [1] 1598).  
 $C_{27}H_{34}O_5$  C 74,0 — H 7,8 — O 18,2 — M. G. 438.  
 1) Anhydrostrophantidinsäurelaktone +  $\frac{1}{2}H_2O$ . Sm. 345° (*B.* 31, 539; 33, 2085). — \*III, 477.  
 $C_{27}H_{34}O_8$  2) Diacetat d. Lariciresinoldiäthyläther. Sm. 113° (*M.* 23, 1024 *C.* 1903 [1] 288).  
 $C_{27}H_{36}O_3$  C 79,4 — H 8,8 — O 11,8 — M. G. 408.  
 1)  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha\alpha$ -Dicamphorylmethan. Sm. 155—156° (*B.* 36, 2640 *C.* 1903 [2] 627).  
 $C_{27}H_{40}O_2$  \*1) Oxycholestenon (*C.* 1903 [1] 815).  
 3) Careleresen. Sm. 75—77° (*Ar.* 241, 156 *C.* 1903 [1] 1029).

- $C_{27}H_{40}O_4$  C 75,7 — H 9,3 — O 15,0 — M. G. 428.  
 1) Anhydrid d. Säure  $C_{27}H_{42}O_5$  (aus Cholestanonol). Sm. 172° (B. 36, 3758 C. 1903 [2] 1418).
- $C_{27}H_{42}O_2$  \*1)  $\alpha$ -Oxycholestenol (C. 1903 [1] 815).  
 3) Cholestandion. Sm. 169° (B. 36, 3755 C. 1903 [2] 1418; B. 37, 2027 C. 1904 [2] 184).
- $C_{27}H_{42}O_3$  \*1) Oxycholestendiol (C. 1903 [1] 815).  
 $C_{27}H_{42}O_4$  C 75,3 — H 9,8 — O 14,9 — M. G. 430.  
 1) Anhydrid d. Säure  $C_{27}H_{44}O_5$ . Sm. 212° (B. 37, 3705 C. 1904 [2] 1699).
- $C_{27}H_{42}O_5$  2) Säure (aus Cholestanonol oder Cholestandion). Sm. 217—219°. Mg (B. 36, 3756 C. 1903 [2] 1418).  
 3) isom. Säure (aus d. Säure  $C_{27}H_{44}O_5$ ). Sm. 255° (B. 37, 3706 C. 1904 [2] 1699).
- $C_{27}H_{42}O_8$  C 65,6 — H 8,5 — O 25,9 — M. G. 494.  
 1) Säure (aus der Säure  $C_{27}H_{44}O_5$ ). Sm. 174° (B. 37, 3707 C. 1904 [2] 1699).
- $C_{27}H_{44}O$  4) Cholestenon. Sm. 78° (B. 37, 3099 C. 1904 [2] 1535).  
 5) Euphorbon. Sm. 113—114° (Ar. 241, 227 C. 1903 [2] 119).
- $C_{27}H_{44}O_2$  C 81,0 — H 11,0 — O 8,0 — M. G. 400.  
 1) Cholestanonol. Sm. 142—143° (140°) (C. 1903 [1] 814; B. 36, 3754 C. 1903 [2] 1417; M. 24, 654 C. 1903 [2] 1235).
- $C_{27}H_{44}O_4$  2) Säure (aus Cholestandion). Sm. 185—217°. Na (B. 37, 2029 C. 1904 [2] 184).  
 3) Säure (aus Cholesterin). Sm. 297° (corr.).  $Ag_2$  (B. 36, 3179 C. 1903 [2] 935; B. 37, 3096 C. 1904 [2] 1534).
- $C_{27}H_{44}O_5$  C 72,3 — H 9,8 — O 17,9 — M. G. 448.  
 1) Säure +  $H_2O$  (aus d. Säure  $C_{27}H_{45}O_4Cl$ ). Sm. 239—240° wasserfrei (B. 37, 3705 C. 1904 [2] 1699).
- $C_{27}H_{48}O$  \*1) Cholesterin (C. 1903 [1] 918, 980).  
 $C_{27}H_{48}O_2$  C 80,2 — H 11,9 — O 7,9 — M. G. 404.  
 1) Casimirol. Sm. 207° (Ar. 241, 173 C. 1903 [2] 125).
- $C_{27}H_{52}O_4$  C 73,6 — H 11,8 — O 14,6 — M. G. 440.  
 1) Acetylcerebronsäure. Na (H. 43, 27 C. 1904 [2] 1550).

## — 27 III —

- $C_{27}H_{16}O_4N_2$  C 75,0 — H 3,7 — O 14,8 — N 6,5 — M. G. 432.  
 1) Benzoat d. Oxydiphenylbenzbisoxazol. Sm. 291° (B. 37, 122 C. 1904 [1] 586).
- $C_{27}H_{16}O_5N_2$  C 72,3 — H 3,6 — O 17,9 — N 6,2 — M. G. 448.  
 1) Anhydrid d. *p*-Dinitrophenyldi[2-Oxynaphtyl]methan. Sm. 252 bis 253° u. Zers. (Soc. 85, 794 C. 1904 [2] 227, 529).
- $C_{27}H_{16}O_{11}N_4$  C 56,6 — H 2,8 — O 30,8 — N 9,8 — M. G. 572.  
 1) Di[2-Nitrobenzoat] d. 4-[2-Nitrobenzoyl]amido-1,3-Dioxybenzol. Sm. 128° (B. 35, 4204 C. 1903 [1] 146).  
 2) Di[3-Nitrobenzoat] d. 4-[3-Nitrobenzoyl]amido-1,3-Dioxybenzol. Sm. 231° (B. 35, 4203 C. 1903 [1] 146).  
 3) Di[4-Nitrobenzoat] d. 4-[4-Nitrobenzoyl]amido-1,3-Dioxybenzol. Sm. 266° (B. 35, 4203 C. 1903 [1] 146).
- $C_{27}H_{17}O_5N$  C 74,5 — H 3,9 — O 18,4 — N 3,2 — M. G. 435.  
 1) Dibenzoat d. 5,6-Dioxy-1-Phenylbenzoxazol. Sm. 144° (B. 37, 118 C. 1904 [1] 586).
- $C_{27}H_{18}O_2N_2$  2) *ms*-[3-Nitrophenyl]dihydro- $\beta$ -Naphtakridin. Sm. 270° (B. 36, 593 C. 1903 [1] 724).  
 3) *ms*-[4-Nitrophenyl]dihydro- $\beta$ -Naphtakridin. Sm. 291° (B. 36, 592 C. 1903 [1] 724).
- $C_{27}H_{19}O_5N$  C 74,1 — H 4,3 — O 18,3 — N 3,2 — M. G. 437.  
 1) Dibenzoat d. 4-Benzoylamido-1,3-Dioxybenzol. Sm. 172° (B. 35, 4200 C. 1903 [1] 146).
- $C_{27}H_{20}ON_2$  2) Phenylhydrazon d. 9-Keto-4-[4-Methylbenzoyl]fluoren. Zers. bei 82° (M. 25, 983 C. 1904 [2] 1653).  
 3) *N*-Benzyl- $\alpha'$ -Phenylpyrophtalin. Sm. 211° (B. 36, 3923 C. 1904 [1] 98).

- $C_{27}H_{20}ON_4$  C 77,9 — H 4,8 — O 3,8 — N 13,5 — M. G. 416.  
 1) 3-Benzoylphenylamido-1,5-Diphenyl-1,2,4-Triazol. Sm. 148—149° (*Ann.* 29, 80 *C.* 1903 [1] 523).
- $C_{27}H_{20}O_2N_2$  2) Verbindung (aus Benzilsäure u. Phenylisocyanat). Sm. 181° (*Bl.* [3] 29, 128 *C.* 1903 [1] 564).
- $C_{27}H_{20}O_3N_2$  3) Benzoat d.  $\alpha$ -Benzoyl- $\alpha$ -Phenyl- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 170—171° (*B.* 37, 3938 *C.* 1904 [2] 1596).
- $C_{27}H_{20}O_4N_2$  4) Benzoat d. 3,4-Di[Benzoylamido]-1-Oxybenzol. Sm. 220—222° (225°) (*B.* 36, 4117 *C.* 1904 [1] 272; *B.* 36, 4125 *C.* 1904 [1] 273).  
 5) Dibenzoat d. 3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 167° (*B.* 36, 2930 *C.* 1903 [2] 887).
- $C_{27}H_{20}N_3Cl$  1) Nitril d.  $\beta$ -Diphenylhydrazon- $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylpropion-säure. Sm. 95° (*J. pr.* [2] 67, 383 *C.* 1903 [1] 1356).
- $C_{27}H_{21}ON$  2) 9-Phenyl-9-[4-Acetylamidophenyl]fluoren. Sm. 213,5° (*B.* 37, 75 *C.* 1904 [1] 519).  
 3) 9-Phenylamido-10-Keto-9-Phenyl-9,10-Dihydroanthracen. Sm. 174—178° u. Zers. (*B.* 37, 3339 *C.* 1904 [2] 1056).  
 4) 10-Acetyl-5,5-Diphenyl-5,10-Dihydroakridin. Sm. 216,5—218,5° (*B.* 37, 3203 *C.* 1904 [2] 1472).
- $C_{27}H_{21}O_2N$  2) Benzoat d. Verb.  $C_{20}H_{17}ON$ . Sm. 155° (*B.* 36, 3922 *C.* 1904 [1] 98).
- $C_{27}H_{21}O_3N_3$  3) Di[Diphenylamid] d. Oximidomalonsäure. Sm. 237—238° u. Zers. K (*C.* 1904 [1] 1555).
- $C_{27}H_{21}O_3N_5$  2)  $\alpha\gamma$ -Di[Phenylhydrazon]- $\beta$ -Keto- $\alpha$ -Phenyl- $\gamma$ -[4-Nitrophenyl]propan. Sm. 219° (*B.* 37, 1533 *C.* 1904 [1] 1609).
- $C_{27}H_{21}O_4N$  C 76,6 — H 5,0 — O 15,1 — N 3,3 — M. G. 423.  
 1) 3-Nitrobenzoat d. 4-Oxy-3-Methyltriphenylmethan. Sm. 93—94° (*B.* 36, 3562 *C.* 1903 [2] 1374).  
 2) Dibenzoat d.  $\alpha\beta$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthan. Sm. 88—89°.  
 $HCl + H_2O$  (*B.* 36, 121 *C.* 1903 [1] 470).  
 C 73,8 — H 4,8 — O 18,2 — N 3,2 — M. G. 439.
- $C_{27}H_{21}O_5N$  1) 4-[3-Nitrobenzoat] d.  $\alpha,4$ -Dioxy-3-Methyltriphenylmethan. Sm. 118—119° (*B.* 36, 3560 *C.* 1903 [2] 1374).
- $C_{27}H_{21}N_2Cl$  1)  $\gamma$ -Phenylhydrazon- $\beta\gamma$ -Diphenyl- $\alpha$ -[2-Chlorphenyl]propen. Sm. 131° (*B.* 35, 3970 *C.* 1903 [1] 31).
- $C_{27}H_{22}ON_4$  3) s-Di[Diphenylmethylenamido]harnstoff. Sm. 221—223° (*B.* 37, 3180 *C.* 1904 [2] 991).
- $C_{27}H_{22}O_2N_2$  6) N-Benzoyl-2-Benzoylamidobenzylphenylamin. Sm. 201—203° (*B.* 37, 3118 *C.* 1904 [2] 1317).  
 7)  $\alpha\beta$ -Dibenzoyl- $\alpha$ -Diphenylmethylhydrazin. Sm. 262° (*J. pr.* [2] 67, 169 *C.* 1903 [1] 873).  
 8) Di[Phenylamid] d. Diphenylmethan-2,4'-Dicarbonsäure. Sm. 227° (*A.* 309, 120). — \*II, 1096.  
 9) Di[Diphenylamid] d. Malonsäure. Sm. 219—220° u. Zers. (*C.* 1904 [1] 1555).
- $C_{27}H_{22}O_3N_4$  C 72,0 — H 4,9 — O 10,7 — N 12,4 — M. G. 450.  
 1) 2-Oxy-3,5-Di[Phenylazo]benzol-1-[ $\alpha$ -Phenylpropionsäure]. Sm. 223° (*B.* 37, 4134 *C.* 1904 [2] 1736).
- $C_{27}H_{22}O_6N_4$  6) Di[Phenylazo]cyanomaklurin. Sm. 245—247° (*Soc.* 67, 942; *C.* 1904 [2] 439). — III, 684.
- $C_{27}H_{22}N_3S$  1) Verbindung. Sm. 198—201° (*C.* 1904 [1] 1003).
- $C_{27}H_{23}ON$  6) 9-[4-Dimethylamidophenyl]-9-Phenylxanthen. Sm. 195,5° (*B.* 37, 2374 *C.* 1904 [2] 344).
- $C_{27}H_{23}OBr_2$  1) Nonabromdehydrocholesterin. Sm. 145° (*M.* 24, 224 *C.* 1903 [2] 21).
- $C_{27}H_{23}O_2N$  C 82,4 — H 5,8 — O 8,1 — N 3,6 — M. G. 393.  
 1) 5-Acetyl-3-Benzoyl-2-Methyl-4,6-Diphenyl-1,4-Dihydropyridin? Sm. 222° (*B.* 36, 2188 *C.* 1903 [2] 569).
- $C_{27}H_{23}O_2N_3$  2) Di[Diphenylamid] d. Amidomalonsäure. Sm. 200—201° (*C.* 1904 [1] 1555).
- $C_{27}H_{23}O_3N$  C 79,2 — H 5,6 — O 11,7 — N 3,4 — M. G. 409.  
 1) 4-Oximido-1-Acetyl-3-Benzoyl-2,6-Diphenyl-1,2,3,4-Tetrahydro-benzol. Sm. 199° (*B.* 36, 2132 *C.* 1903 [2] 366).
- $C_{27}H_{23}O_8N$  \*2) Monobenzoat d. Chelidonin. Sm. 217° (*C.* 1904 [1] 1224).  
 3)  $\beta\zeta$ -Diketo- $\gamma\epsilon$ -Dibenzoyl- $\delta$ -[3-Nitrophenyl]heptan. Sm. 229—230° u. Zers. (*Soc.* 83, 1376 *C.* 1904 [1] 164, 450).

- $C_{27}H_{28}O_6N_3$  C 66,8 — H 4,7 — O 19,8 — N 8,7 — M. G. 485.  
 1) Tribenzoat d.  $\beta\gamma\delta$ -Trioximidohexan. Zers. bei  $180^\circ$  (*G.* 34 [1] 46 *C.* 1904 [1] 1150).
- $C_{27}H_{28}O_{12}N_3$  \*2) Tri[3-Nitrobenzyliden]- $\alpha$ -Mannit. Sm.  $254^\circ$  (*Bz.* [3] 29, 504 *C.* 1903 [2] 237).
- $C_{27}H_{24}O_2N_2$  5) Dimethyläther d.  $\alpha$ -Phenylazo-4,4'-Dioxytriphenylmethan. Sm.  $112^\circ$  (*B.* 36, 2788 *C.* 1903 [2] 882).
- $C_{27}H_{24}O_2S_3$  1) 2,3,5-Tribenzyläther d. 2,3,5-Trimerkapto-1,4-Dioxybenzol. Sm.  $94-98^\circ$  (*A.* 336, 154 *C.* 1904 [2] 1300).
- $C_{27}H_{24}O_4N_4$  C 69,2 — H 5,1 — O 13,7 — N 12,0 — M. G. 468.  
 1) Di[4,6-Dioxy-3-(oder 5)-Phenylazo-2-Methylphenyl]methan (Methylenbisbenzolazoorcin) (*A.* 329, 303 *C.* 1904 [1] 793).
- $C_{27}H_{24}O_4S$  1) Dimethyläther d.  $\alpha$ -Phenylsulfon-4,4'-Dioxytriphenylmethan. Sm.  $160-161^\circ$  (*B.* 36, 2789 *C.* 1903 [2] 882).
- $C_{27}H_{24}O_8N_4$  C 64,8 — H 4,8 — O 19,2 — N 11,2 — M. G. 500.  
 1) Di[2,4,6-Trioxo-3,5-Diphenylazo-3-Methylphenyl]methan (Methylenbisbenzolazomethylphloroglucin). Sm. noch nicht bei  $290^\circ$  (*A.* 329, 282 *C.* 1904 [1] 796).
- $C_{27}H_{24}N_2S_3$  1) Di[4-Methylphenyläther] d. s-Di[4-Merkaptophenyl]thioharnstoff. Sm.  $155^\circ$  (*J. pr.* [2] 68, 272 *C.* 1903 [2] 993).
- $C_{27}H_{26}O_3N_5$  C 69,4 — H 5,3 — O 10,3 — N 15,0 — M. G. 467.  
 1) Phenylamido-4-Nitrophenylhydrazonmethyläther d. Dibenzylhydroxylamin. Sm.  $209^\circ$  (*B.* 37, 3237 *C.* 1904 [2] 1153).
- $C_{27}H_{26}O_4N$  C 75,9 — H 5,8 — O 15,0 — N 3,3 — M. G. 427.  
 1) Benzylidihydroberberin. Sm.  $161-162^\circ$  (*B.* 37, 3336 *C.* 1904 [2] 1156).
- $C_{27}H_{26}O_5N$  C 73,1 — H 5,6 — O 18,1 — N 3,2 — M. G. 443.  
 1) Benzoylanhydrooctarninacetophenon. Sm.  $107-108^\circ$  (*B.* 37, 2750 *C.* 1904 [2] 546).
- $C_{27}H_{26}ON_2$  2) 4-Diäthylamidophenyl-4-Phenylamido-1-Naphtylketon. Sm. 146 bis  $147^\circ$  (*B.* 37, 1903 *C.* 1904 [2] 115).
- $C_{27}H_{26}OBr_6$  1) Hexabromdehydrocholesterin. Sm.  $112^\circ$  (*M.* 24, 224 *C.* 1903 [2] 21).
- $C_{27}H_{26}O_2N_2$  3) 2-Naphtylamid d.  $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm.  $150^\circ$  (*C. r.* 138, 580 *C.* 1904 [1] 925).
- $C_{27}H_{26}O_4N_2$  3) 4,4'-Di[Diäcetyl-amido]triphenylmethan. Sm.  $172-173^\circ$  (*C.* 1904 [2] 227).
- $C_{27}H_{26}O_4N_6$  C 65,0 — H 5,2 — O 12,9 — N 16,9 — M. G. 498.  
 1) Di[Benzylidenhydrazid] d.  $\alpha$ -Benzoylamidoacetyl-amidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm.  $204^\circ$  (*J. pr.* [2] 70, 175 *C.* 1904 [2] 1396).
- $C_{27}H_{26}O_6N_6$  2) Di[2-Oxybenzylidenhydrazid] d.  $\alpha$ -Benzoylamidoacetyl-amidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm.  $209^\circ$  (*J. pr.* [2] 70, 175 *C.* 1904 [2] 1396).  
 3) Di[Benzoylhydrazid] d.  $\alpha$ -Benzoylamidoacetyl-amidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm.  $228^\circ$  (*J. pr.* [2] 70, 176 *C.* 1904 [2] 1396).
- $C_{27}H_{27}O_2N$  2) 4-Oximido-1-Oxy-1,6-Diphenyl-2-[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm.  $221-223^\circ$  (*Ann.* 31, 145 *C.* 1904 [1] 806).
- $C_{27}H_{27}O_3N_3$  1) Triäthyläther d. 2,4,6-Tri[4-Oxyphenyl]-1,3,5-Triazin. Sm.  $171^\circ$  corr. (*B.* 36, 3193 *C.* 1903 [2] 956).
- $C_{27}H_{27}O_4N$  \*2) Tetramethyläther d. 6,7-Dioxy-2-Benzyl-1-[3,4-Dioxybenzyliden]-1,2-Dihydroisochinolin (Benzylidenpapaverin; N-Benzylisopapaverin). Sm.  $139-140^\circ$ . Pikrat (*B.* 37, 528 *C.* 1904 [1] 818).
- $C_{27}H_{28}O_4N_2$  \*4) Salicylat d. Chinin. Sm.  $140^\circ$  (*D.R.P.* 137207 *C.* 1903 [1] 110).
- $C_{27}H_{28}O_4N_4$  \*2) Disazobenzolsantonsäure (*B.* 36, 1395 *C.* 1903 [1] 1360).
- $C_{27}H_{28}O_7N_2$  3) 4-Nitrobenzylhydroxyd d. Papaverin. Salze siehe (*B.* 37, 3811 *C.* 1904 [2] 1574).
- $C_{27}H_{20}O_4N_5$  C 66,5 — H 6,0 — O 13,1 — N 14,4 — M. G. 487.  
 1) Di[4-Methylphenylamid] d.  $\alpha$ -Benzoylamidoacetyl-amidoäthan- $\alpha$ -Carbonsäure- $\beta$ -Amidoameisensäure. Sm.  $216^\circ$  (*J. pr.* [2] 70, 181 *C.* 1904 [2] 1397).
- $C_{27}H_{30}ON_2$  2)  $\alpha$ -Benzoyl- $\alpha$ -[2,4,6-Trimethylbenzyl]- $\beta$ -[2,4,6-Trimethylbenzyliden]hydrazin. Sm.  $142,5-143^\circ$  (*C.* 1903 [1] 142).
- $C_{27}H_{30}OBr_2$  1) Dibromdehydrocholesterin. Sm.  $62-64^\circ$  (*M.* 24, 225 *C.* 1903 [2] 21).
- $C_{27}H_{30}O_4N_2$  C 72,6 — H 6,7 — O 14,4 — N 6,3 — M. G. 446.  
 1) Diacetat d. 4',4''-Di[Dimethylamido]-3,4-Dioxytriphenylmethan. Sm.  $141^\circ$  (*B.* 36, 2918 *C.* 1903 [2] 1065).

- $C_{27}H_{30}N_3P$  \*1) Tri[1,2,3,4-Tetrahydro-1-Chinolyl]phosphin. Sm. 202—204° (A. 326, 171 C. 1903 [1] 762).
- $C_{27}H_{31}O_2N_3$  C 75,5 — H 7,2 — O 7,5 — N 9,8 — M. G. 429.
- 1) Aethyläther d. 5-Oxy-3-Keto-1,1-Di[4-Dimethylamidophenyl]-2-Methyl-2,3-Dihydropseudoisindol. Sm. 181° (A. 329, 78 C. 1903 [2] 1440).
- $C_{27}H_{32}O_2N_4$  2)  $\delta\delta$ -Di[3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydro-4-Pyrazolyl]- $\beta$ -Methylbutan (Isovaleryldiantipyrin). Sm. 160—161° (C. 1903 [1] 167).
- $C_{27}H_{33}O_6S_3$  1)  $\beta\beta\epsilon$ -Tribenzylsulfonhexan. Sm. 129—130° (B. 37, 507 C. 1904 [1] 883).
- $C_{27}H_{35}O_2N_3$  6) Aethylester d. 4',4''-Di[Dimethylamido]-3-Methyltriphenylmethan-6-Amidoameisensäure. Sm. 158—159° (B. 36, 2783 C. 1903 [2] 881).
- 7) Methylamid d. 4',4''-Di[Dimethylamido]-4-Oxytriphenylmethan-4-Aethyläther-2-Carbonsäure. Sm. 185° (A. 329, 74 C. 1903 [2] 1440).
- $C_{27}H_{34}O_8N_3$  C 63,0 — H 6,6 — O 24,9 — N 5,4 — M. G. 514.
- 1) Diäthylester d. Methylendi[Phenylamidoessigsäurecarbonsäure]. Sm. 113—114° (C. 1903 [2] 835).
- $C_{27}H_{40}O_2Br_2$  1) Dibromcholestandion. Sm. 165° u. Zers. (B. 37, 2031 C. 1904 [2] 185).
- $C_{27}H_{41}O_8Cl$  1) Anhydrid d. Säure  $C_{27}H_{43}O_4Cl$ . Sm. 187° (B. 37, 3705 C. 1904 [2] 1699).
- $C_{27}H_{41}O_5Br$  1) Bromcholestanondisäure. Sm. 151° u. Zers. (B. 37, 2032 C. 1904 [2] 185).
- $C_{27}H_{42}O_6N_2$  C 66,1 — H 8,6 — O 19,6 — N 5,7 — M. G. 490.
- 1) Nitrat d. Nitrooxycholesterin. Sm. 123° (C. 1903 [1] 814).
- $C_{27}H_{45}OCl$  1) Chlorcholestanon. Sm. 128,5—129° (M. 24, 656 C. 1903 [2] 1236).
- 2) isom. Chlorcholestanon. Sm. 180—181° (B. 37, 2032 Anm. C. 1904 [2] 185; B. 37, 3702 C. 1904 [2] 1699).
- $C_{27}H_{45}O_2N$  C 78,4 — H 10,4 — O 7,7 — N 3,4 — M. G. 413.
- 1) Nitrocholesterin. Sm. 94—95° (M. 24, 649 C. 1903 [2] 1235).
- $C_{27}H_{45}O_4N$  C 72,8 — H 9,7 — O 14,4 — N 3,1 — M. G. 445.
- 1) Nitrooxycholesterin. Sm. 123—124° (C. 1903 [1] 814).
- $C_{27}H_{45}O_4Cl$  1) Säure (aus Chlorcholestanon). Sm. 243° (B. 37, 3704 C. 1904 [2] 1699).
- $C_{27}H_{45}O_6N$  C 70,3 — H 9,3 — O 17,3 — N 3,0 — M. G. 461.
- 1) Oxim d. Säure  $C_{27}H_{43}O_5$ . Sm. 213—214° (B. 37, 3707 C. 1904 [2] 1699).
- $C_{27}H_{45}O_8N$  \*1) Cevin (B. 37, 1946 C. 1904 [2] 125).
- $C_{27}H_{45}O_5N$  C 61,7 — H 8,2 — O 27,4 — N 2,7 — M. G. 525.
- 1) Cevinoxid. Sm. 275—278°. HCl, (HCl, AuCl<sub>3</sub>) (B. 37, 1952 C. 1904 [2] 126).
- $C_{27}H_{44}OBr_2$  2) Dibromdihydroeuphorbon. Sm. 81° (Ar. 241, 240 C. 1903 [2] 120).
- $C_{27}H_{44}O_2N_2$  C 75,7 — H 10,3 — O 7,5 — N 6,5 — M. G. 428.
- 1) Dioxim d. Cholestandion. Sm. 205° u. Zers. (B. 36, 3756 C. 1903 [2] 1418).
- $C_{27}H_{45}ON$  C 81,2 — H 11,3 — O 4,0 — N 3,5 — M. G. 399.
- 1) Oxim d. Cholestenon. Sm. 152° (B. 37, 3101 C. 1904 [2] 1535).

## — 27 IV —

- $C_{27}H_{17}O_7NS$  1) Di[2-Naphtylester] d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 134° (Am. 30, 384 C. 1904 [1] 275).
- $C_{27}H_{18}O_3NCl$  1) 6-Chlor-3-[2-Methylphenyl]amidofluoran. Sm. 192° (D.R.P. 85885; D.R.P. 139727 C. 1903 [1] 796). — \*III, 574.
- 2) 6-Chlor-3-[4-Methylphenyl]amidofluoran. Sm. 194° (D.R.P. 85885). — \*III, 574.
- $C_{27}H_{19}O_2N_2Cl$  1)  $\alpha$ -Benzoylimido- $\alpha$ -[Benzoyl-4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 169° (J. pr. [2] 67, 456 C. 1903 [1] 1421).
- $C_{27}H_{21}O_{12}N_8Br_2$  1) Säure (aus Dibromdehydrocholesterin). Zers. bei 198° (M. 24, 226 C. 1903 [2] 21).
- $C_{27}H_{25}O_9NS_3$  1) Tribenzolsulfonat d. Suprarenin (M. 24, 279 C. 1903 [2] 302). — \*III, 667.
- $C_{27}H_{30}O_4NBr$  1) Tetramethyläther d. 6,7-Dioxy-2-Benzyl-1-[6-Brom-3,4-Dioxybenzyliden]-1,2-Dihydroisochinolin. Sm. 113° (B. 37, 3814 C. 1904 [2] 1575).
- $C_{27}H_{27}O_6N_2Cl$  2) 4-Nitrochlorbenzylat d. Papaverin. Sm. 132° u. Zers. + HgCl<sub>2</sub> (B. 37, 3811 C. 1904 [2] 1574).

- $C_{27}H_{29}N_5SSi$  1) Verbindung (aus Aethylsenfö u. Silicotetraphenylamid) (*Soe.* 83, 255 *C.* 1903 [1] 572, 875).
- $C_{27}H_{30}N_3SP$  \*1) Tri[1,2,3,4-Tetrahydro-1-Chinolyl]phosphinsulfid (*A.* 326, 219 *C.* 1903 [1] 822).
- $C_{27}H_{38}ON_3P$  1) Tri[2,4,5-Trimethylphenylamid] d. Phosphorsäure. Sm. 217° (*A.* 326, 252 *C.* 1903 [1] 868).
- 2) Tri[2,4,6-Trimethylphenylamid] d. Phosphorsäure. Sm. 240° (*A.* 326, 252 *C.* 1903 [1] 868).
- $C_{27}H_{42}OClBr$  1) Chlorbromcholestanon. Sm. 116—117° (*B.* 37, 3704 *C.* 1904 [2] 1699).
- $C_{27}H_{44}ONCl$  1) Oxim d. isom. Chlorecholestanon. Sm. 179—181° (*B.* 37, 3703 *C.* 1904 [2] 1699).

## — 27 V —

- $C_{27}H_{27}O_4NClBr$  1) Chlorbenzylat d. 6,7-Dioxy-1-[6-Brom-3,4-Dioxybenzyl]isochinolintetramethyläther (*B.* 37, 3814 *C.* 1904 [2] 1575).

**C<sub>28</sub>-Gruppe.**

- $C_{28}H_{20}$  2) 9,10-Dibenzylidenanthracen. Sm. 237—240° (*M.* 25, 799 *C.* 1904 [2] 1137).
- $C_{28}H_{22}$  \*2) 9,10-Dibenzylanthracen. Sm. 241° (*M.* 25, 793 *C.* 1904 [2] 1137).
- 3)  $\alpha\alpha\delta\delta$ -Tetraphenyl- $\alpha\gamma$ -Butadien. Sm. 202°. +  $C_6H_6$  (*C. r.* 136, 695 *C.* 1903 [1] 967; *Bl.* [3] 29, 687 *C.* 1903 [2] 566).
- $C_{28}H_{24}$  2) polym. Stilben. Sm. 163° (*B.* 35, 4129 *C.* 1903 [1] 160).
- $C_{28}H_{26}$  \*1)  $\alpha\beta\gamma\delta$ -Tetraphenylbutan. Sm. 255° (*B.* 36, 539 *C.* 1903 [1] 707).
- 4)  $\alpha\alpha\delta\delta$ -Tetraphenylbutan. Sm. 121°. +  $C_6H_6$  (*Bl.* [3] 29, 688 *C.* 1903 [2] 566).
- $C_{28}H_{58}$  2) Kohlenwasserstoff (aus Haschisch) (*C.* 1903 [2] 199).

## — 28 II —

- $C_{28}H_{18}O_6$  3) Dibenzoat d. 4,5-Dioxy-9,10-Phenanthrenchinon. Sm. 170° (*B.* 36, 3752 *C.* 1904 [1] 38).
- $C_{28}H_{16}N_2$  3) 1,2,2',1'-Anthrazin. Sm. 390° (400° u. Zers.) (*B.* 36, 1722 *C.* 1903 [2] 44; *B.* 36, 3442 *C.* 1903 [2] 1280).
- $C_{28}H_{18}O_8$  3) Anhydrid d.  $\alpha\alpha$ -Diphenyl- $\beta\beta$ -Biphenylenäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 256° (*B.* 29, 738). — \*II, 1109.
- $C_{28}H_{18}O_4$  7) Dibenzoat d. 9,10-Dioxyphenanthren. Sm. 230—231° (*D.R.P.* 151981 *C.* 1904 [2] 167).
- $C_{28}H_{16}O_5$  \*1) Anhydrid d. Diphenylketon-2-Carbonsäure. Sm. 127° (*M.* 25, 478 *C.* 1904 [2] 337).
- $C_{28}H_{18}O_9$  \*2) Tetrasalicylid (*J. pr.* [2] 69, 29 *C.* 1904 [1] 641).
- $C_{28}H_{18}N_2$  3) 9,9'-Azophenanthren. Zers. bei 270° (*B.* 36, 2514 *C.* 1903 [2] 506).
- $C_{28}H_{20}O_2$  9) 4-Oxy-2-Methylphenyldinaphtopyran. Sm. 215° (*C. r.* 138, 283 *C.* 1904 [1] 730).
- 10) 4-Oxy-3-Methylphenyldinaphtopyran. Sm. 232—233° (*C. r.* 138, 283 *C.* 1904 [1] 730).
- 11) 6-Oxy-3-Methylphenyldinaphtopyran. Sm. 249—250° (*C. r.* 138, 284 *C.* 1904 [1] 730).
- $C_{28}H_{20}O_8$  \*3) Guajakoldinaphtopyran (Verb. aus Vanillin u.  $\beta$ -Naphtol). Sm. 210° (*C. r.* 137, 860 *C.* 1904 [1] 104).
- $C_{28}H_{20}O_4$  7)  $\alpha\alpha$ -Diphenyl- $\beta\beta$ -Biphenylenäthan- $\alpha\beta$ -Dicarbonsäure (*B.* 29, 734). — \*II, 1109.
- $C_{28}H_{20}O_8$  C 69,4 — H 4,1 — O 26,4 — M. G. 484.
- 1) 5,7-Diacetoxyl-3-Benzoyl-4-Methylen-2-Phenyl-1,4-Benzpyran-2<sup>3</sup>-Carbonsäure. Sm. 189° u. Zers. (*B.* 37, 1971 *C.* 1904 [2] 232).
- $C_{28}H_{20}O_{11}$  4) Tetraacetat d. Phloroglucinphtalein. Sm. 230° u. Zers. (*B.* 36, 1073 *C.* 1903 [1] 1181).
- $C_{28}H_{20}Cl_8$  \*1) Ditolanhexachlorid (*B.* 36, 3063 *C.* 1903 [2] 946).
- $C_{28}H_{20}S$  \*1) Thionessal. Sm. 184° (*R.* 21, 422 *C.* 1903 [1] 503; *B.* 36, 538 *C.* 1903 [1] 707).

- $C_{28}H_{21}Br$  \*1) 9-[ $\alpha$ -Brombenzyl]-10-Benzylanthracen. Sm. 187° (*M.* 25, 794 *C.* 1904 [2] 1137).
- $C_{28}H_{22}O$  \*7) 9-[ $\alpha$ -Oxybenzyl]-10-Benzylanthracen. Sm. 151° (*M.* 25, 806 *C.* 1904 [2] 1137).
- $C_{28}H_{22}O_2$  7) Benzoat d.  $\alpha$ -Oxy- $\alpha\gamma\gamma$ -Triphenylpropen. Sm. 220° (*Am.* 31, 653 *C.* 1904 [2] 446).
- $C_{28}H_{22}O_3$  4) Dimethyläther d. 10-Keto-9,9-Di[4-Oxyphenyl]-9,10-Dihydroanthracen. Sm. 208° (*B.* 37, 3618 *C.* 1904 [2] 1503).
- $C_{28}H_{22}O_4$  \*2) Dibenzoat d.  $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 148,9° (*C.* 1904 [1] 1650).
- $C_{28}H_{22}O_5$  \*1) Dibenzilsäure (*B.* 36, 145 *C.* 1903 [1] 465).
- 2) 2,5-Dibenzoat d. 2,5,4'-Trioxydiphenylmethan-4'-Methyläther. Sm. 125° (*B.* 37, 3488 *C.* 1904 [2] 1301).
- $C_{28}H_{24}O$  3) 2,2,5,5-Tetraphenyltetrahydrofuran. Sm. 182° (*C. r.* 136, 695 *C.* 1903 [1] 967).
- $C_{28}H_{24}O_2$  4) Acetat d. 4'-Oxy-4-Methyltetraphenylmethan. Sm. 135° (*B.* 37, 660 *C.* 1904 [1] 952).
- $C_{28}H_{24}O_3$  2) Tetraguajakchinon. Sm. 135—140° (*C. r.* 137, 1271 *C.* 1904 [1] 445).
- $C_{28}H_{24}N_2$  12)  $\gamma$ -Phenylhydrazon- $\beta\gamma$ -Diphenyl- $\alpha$ -[4-Methylphenyl]propen. Sm. 187° (*B.* 35, 3967 *C.* 1903 [1] 31).
- 13) 4,4'-Di[4-Methylbenzylidenamido]biphenyl. Sm. 231° (*B.* 37, 3423 *C.* 1904 [2] 1295).
- $C_{28}H_{26}O_2$  \*1)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 163—164° (*B.* 37, 2762 *C.* 1904 [2] 707).
- 5)  $\alpha\delta$ -Dioxy- $\alpha\alpha\delta\delta$ -Tetraphenylbutan. Sm. 208° (202°) (*C. r.* 136, 694 *C.* 1903 [1] 967; *B.* 37, 2641 *C.* 1904 [2] 529).
- $C_{28}H_{26}O_3$  C 68,6 — H 5,3 — O 26,1 — M. G. 490.
- 1) Tetraguajakhydrochinon. Sm. 115—120° (*C. r.* 137, 1271 *C.* 1904 [1] 445).
- $C_{28}H_{26}N_2$  6)  $\alpha$ -Phenylazotri[4-Methylphenyl]methan. Sm. 113—116° u. Zers. (*B.* 37, 3160 *C.* 1904 [2] 1048).
- $C_{28}H_{27}N$  C 89,1 — H 7,2 — N 3,7 — M. G. 377.
- 1)  $\alpha$ -Phenylamidotri[4-Methylphenyl]methan. Sm. 131° (*B.* 37, 3159 *C.* 1904 [2] 1048).
- $C_{28}H_{28}O_6$  2) Tribenzoat d.  $\delta$ -Oxy- $\gamma\gamma$ -Di[Oxymethyl]- $\beta$ -Methylbutan. Sm. 55° (*B.* 36, 1346 *C.* 1903 [1] 1298).
- $C_{28}H_{28}N_2$  8)  $\alpha$ -Phenylhydrazidotri[4-Methylphenyl]methan (*B.* 37, 3160 *C.* 1904 [2] 1049).
- 9) Verbindung (aus 2-Methylindol u. Cuminol). Sm. 218—219° (*B.* 36, 4329 *C.* 1904 [1] 463).
- $C_{28}H_{31}N_3$  C 82,1 — H 7,6 — N 10,3 — M. G. 409.
- 1) Di[4-Dimethylamidophenyl]-4-Methylamido-1-Naphtylmethan. Sm. 201—202° (*C.* 1903 [1] 87; *B.* 37, 1908 *C.* 1904 [2] 115).
- $C_{28}H_{32}O_{17}$  C 52,5 — H 5,0 — O 42,5 — M. G. 640.
- 1) Cocacitrin + 3H<sub>2</sub>O. Sm. 186° (wasserfrei) (*J. pr.* [2] 66, 403 *C.* 1903 [1] 527).
- $C_{28}H_{33}O_2$  C 82,8 — H 9,3 — O 7,9 — M. G. 406.
- 1)  $\gamma\delta$ -Diketo- $\epsilon\zeta$ -Di[4-Isopropylphenyl]dekan. Sm. 169,5° (*A.* 330, 260 *C.* 1904 [1] 947).
- 2)  $\beta\eta$ -Diketo- $\delta\epsilon$ -Di[4-Isopropylphenyl]- $\gamma\zeta$ -Dimethyloktan. Sm. 145,5° (*A.* 330, 263 *C.* 1904 [1] 947).
- $C_{28}H_{39}O_{10}$  \*4) Oktoacetat d. Melibiose. Sm. 170—171° (*C.* 1904 [1] 1645).
- 9) Oktacetylcellose. Sm. 228—229° (*Bl.* [3] 31, 856 *C.* 1904 [2] 644).
- 10) isom. Oktacetylcellose. Sm. 196° (*Bl.* [3] 31, 856 *C.* 1904 [2] 644).
- 11) Oktaacetat d. Mannobiose C<sub>12</sub>H<sub>22</sub>O<sub>11</sub> (aus Salepschleim) (*B.* 36, 3201 *C.* 1903 [2] 1055).
- $C_{28}H_{44}O_2$  \*2) Acetat d. Lupeol. Sm. 210° (*B.* 37, 4108 *C.* 1904 [2] 1655).
- $C_{28}H_{44}O_3$  3) Phenylester d. Behenolsäure. Sm. 43° (*B.* 36, 3602 *C.* 1903 [2] 1314).
- C 78,5 — H 10,3 — O 11,2 — M. G. 428.
- 1) Formiat d. Cholestanonol. Sm. 104—105° (*B.* 36, 3754 *C.* 1903 [2] 1417).
- $C_{28}H_{46}O$  2) Verbindung (aus *Asclepias syriaca* L.). Sm. 180—181° (*J. pr.* [2] 68, 456 *C.* 1904 [1] 191).
- $C_{28}H_{46}O_2$  5) Arnisterin. Sm. 249—250°. + C<sub>3</sub>H<sub>8</sub>O (*C. r.* 138, 765 *C.* 1904 [1] 1224).

- $C_{28}H_{46}O_2$  6) Verbindung (aus *Asclepias syriaca* L.). Sm. 40—45° (*J. pr.* [2] 68, 398 *C.* 1904 [1] 105).  
 $C_{28}H_{46}O_4$  C 75,3 — H 10,3 — O 14,4 — M. G. 446.  
 1) Methyl ester d. Säure  $C_{27}H_{44}O_4$ . Sm. 105° (*B.* 37, 2030 *C.* 1904 [2] 184).  
 2) Monomethylester d. Säure  $C_{27}H_{44}O_4$  (aus Cholesterin). Sm. 125° (*B.* 37, 3098 *C.* 1904 [2] 1535).  
 $C_{28}H_{48}O$  3) Anthesterin (oder  $C_{29}H_{50}O$ ). Sm. 221—223° (*Bl.* [3] 27, 1231 *C.* 1903 [1] 237).  
 $C_{28}H_{48}O_{1,4}$  1) Herniariasäure (*C.* 1904 [1] 1215).  
 $C_{28}H_{50}O_2$  C 80,4 — H 12,0 — O 7,6 — M. G. 418.  
 1) Oleat d. Borneol. Sd. 295°<sub>18</sub> (*C. r.* 136, 238 *C.* 1903 [1] 584).  
 $C_{28}H_{52}O_2$  \* 1) Stearat d. d-Borneol (*C. r.* 136, 238 *C.* 1903 [1] 584).  
 $C_{28}H_{52}N_2$  C 80,8 — H 12,5 — N 6,7 — M. G. 416.  
 1) 1,3-Di[Diisocamylamidomethyl]benzol. Fl. (2HCl, PtCl<sub>4</sub>), 2 Pikrat (*B.* 36, 1676 *C.* 1903 [2] 29).  
 $C_{28}H_{56}O_2$  \* 5) Acetat d. Cerylalkohol. Sm. 64,3° (*B.* 36, 1053 *C.* 1903 [1] 1148).

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- $C_{28}H_{12}O_4N_2$  C 76,4 — H 2,7 — O 14,5 — N 6,4 — M. G. 440.  
 1) 1,2,2',1'-Anthrachinonazin.  $H_2SO_4$  (*B.* 36, 3434 *C.* 1903 [2] 1279).  
 $C_{28}H_{12}N_2Br_4$  1) 2,7,2',7'-Tetrabromphenanthrazin (aus 2,7-Dibrom-9,10-Phenanthrenchinon). Sm. noch nicht bei 350° (*B.* 37, 3570 *C.* 1904 [2] 1403).  
 $C_{28}H_{14}O_4N_2$  C 76,0 — H 3,2 — O 14,5 — N 6,3 — M. G. 442.  
 1) Indanthren. Zers. bei 470—500° (*B.* 36, 931 *C.* 1903 [1] 1031; *B.* 36, 3412 *C.* 1903 [2] 1276; *B.* 36, 3427 *C.* 1903 [2] 1278).  
 $C_{28}H_{14}N_2Br_2$  1) Dibromphenanthrazin (aus 2-Brom-9,10-Phenanthrenchinon). Sm. noch nicht bei 350° (*B.* 37, 3562 *C.* 1904 [2] 1401).  
 $C_{28}H_{15}O_4N_3$  C 73,5 — H 3,3 — O 14,0 — N 9,2 — M. G. 457.  
 1) 4-Amidoindanthren (*B.* 36, 3438 *C.* 1903 [2] 1280).  
 $C_{28}H_{16}O_2N_2$  C 81,5 — H 3,9 — O 7,8 — N 6,8 — M. G. 412.  
 1) Anthranonazin (*B.* 36, 3440 *C.* 1903 [2] 1280).  
 2) Verbindung (aus Indanthren) (*B.* 36, 933 *C.* 1903 [1] 1032).  
 $C_{28}H_{16}O_{11}Cl_4$  1) Tetraacetat d. Tetrachlordioxyfluorescein. Sm. 280° (*B.* 36, 1077 *C.* 1903 [1] 1182).  
 $C_{28}H_{17}O_2N$  2)  $\beta$ -Naphthylehinophtalon. Sm. 326° (*B.* 37, 3017 *C.* 1904 [2] 1409).  
 3)  $\beta$ -Naphthylisochinophtalon. Sm. 273° (*B.* 37, 3017 *C.* 1904 [2] 1409).  
 $C_{28}H_{18}ON_2$  C 84,4 — H 4,5 — O 4,0 — N 7,1 — M. G. 398.  
 1) 9,9'-Azoxyphenanthren. Zers. bei 254—255°. +  $C_2H_5O$  (*B.* 36, 2512 *C.* 1903 [2] 506).  
 $C_{28}H_{18}O_2N_2$  4) 1,4-Di[Benzoylamido]naphtalin. Sm. 280,5° (*B.* 36, 4149, 4150 *C.* 1904 [1] 187).  
 5)  $\alpha\beta$ -Dibenzoyl- $\alpha$ -[1-Naphtyl]hydrazin. Sm. 195—196° (*B.* 36, 4149 *C.* 1904 [1] 187).  
 6) N-Dihydroanthranonazin (*B.* 36, 3439 *C.* 1903 [2] 1280).  
 $C_{28}H_{18}O_{11}Cl_2$  1) Tetraacetat d. Dichlordioxyfluorescein. Sm. 276° (*B.* 36, 1081 *C.* 1903 [1] 1182).  
 $C_{28}H_{18}O_{11}Br_2$  2) Tetraacetat d. Dibromdioxyfluorescein. Sm. 272° (*B.* 36, 1082 *C.* 1903 [1] 1182).  
 $C_{28}H_{20}O_4N_2$  4) Tetrabenzoylhydrazin. Sm. 238° (220°) (*Bl.* [3] 31, 626 *C.* 1904 [2] 97; *J. pr.* [2] 70, 275 Anm. *C.* 1904 [2] 1544).  
 $C_{28}H_{20}O_4N_6$  C 66,6 — H 4,0 — O 12,7 — N 16,6 — M. G. 504.  
 1)  $\alpha\beta$ -Di[3-(3-Carboxylphenyl)azobenzyliden]hydrazin (*B.* 36, 3473 *C.* 1903 [2] 1269).  
 $C_{28}H_{20}O_5N_4$  C 68,3 — H 4,0 — O 16,3 — N 11,4 — M. G. 492.  
 1) N-4-Formylphenyläther d. 4-Azoxylbenzaloxim (*B.* 36, 794 *C.* 1903 [1] 968; *B.* 36, 2307 *C.* 1903 [2] 429).  
 $C_{28}H_{20}O_6N_4$  C 66,1 — H 3,9 — O 18,9 — N 11,0 — M. G. 508.  
 1) p-Dinitro-1,5-Di[4-Methylphenylamido]-9,10-Anthrachinon (D.R.P. 142512 *C.* 1903 [2] 84).  
 2) p-Dinitro-1,8-Di[4-Methylphenylamido]-9,10-Anthrachinon (D.R.P. 142512 *C.* 1903 [2] 84).  
 $C_{28}H_{20}O_7N_6$  C 60,9 — H 3,6 — O 20,3 — N 15,2 — M. G. 552.  
 1) Verbindung (aus 1,3-Dinitrobenzol u. Benzyleyanid). Zers. bei 97° (*B.* 37, 838 *C.* 1904 [1] 1202).

- $C_{28}H_{20}O_{10}Br_2$  1) Aethylester d. Triacetyldibromdioxylfluorescein. Sm. 252° (B. 36, 1083 C. 1903 [1] 1182).
- $C_{28}H_{21}O_4N$  5) Dimethyläther d. Hydrochinonphtaleinanilid. Sm. 183° (B. 36, 2960 C. 1903 [2] 1006).
- 6) 4-Benzylphenylester d.  $\alpha$ -Phenyl- $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 155—156° (G. 33 [2] 457 C. 1904 [1] 654).
- $C_{28}H_{21}O_5N$  2) Dimethylenäther d. 3,4-Dioxy-cinnamylidenmethyl-4-[3,4-Dioxy-cinnamyliden]amidophenylketon. Sm. 195—196° u. Zers. (B. 37, 1701 C. 1904 [1] 1497).
- $C_{28}H_{22}O_2N_2$  4) 1,4-Di[4-Methylphenylamido]-9,10-Anthrachinon (Chinizaringrün). Sm. 218° (D.R.P. 2 126803; C. 1904 [2] 339). — \*III, 297.
- 5)  $\beta$ -Benzoylimido- $\beta$ -Phenylbenzoylamido- $\alpha$ -Phenyläthan. Sm. 175° (C. 1903 [2] 831).
- 6)  $\alpha$ -Benzoylimido- $\alpha$ -[Benzoyl-2-Methylphenyl]amido- $\alpha$ -Phenylmethan. Sm. 167° (C. 1903 [2] 831).
- 7) 1,5-Di[4-Methylphenylamido]-9,10-Anthrachinon. Sm. 200—210° (C. 1903 [1] 722).
- $C_{23}H_{22}O_3N_2$  5) Benzoat d. 4-Oxy-3-Benzoylphenylhydrazonmethyl-1-Methylbenzol. Sm. 164° (B. 35, 4107 C. 1903 [1] 150).
- 6) Benzoat d. 2-Oxy-1-Benzoyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzodiazin. Sm. 168—169° (B. 37, 3119 C. 1904 [2] 1317).
- $C_{28}H_{22}O_4S_3$  1) 1,4-Diacetat d. 2,3,5-Trimerkapto-1,4-Dioxybenzol-2,3,5-Triphenyläther. Sm. 101—101,5° (A. 336, 141 C. 1904 [2] 1299).
- $C_{28}H_{22}O_5N_4$  C 68,0 — H 4,4 — O 16,2 — N 11,3 — M. G. 494.
- 1) Aethyläther d. 4,4'-Di[4-Nitrobenzylidenamido]-3-Oxybiphenyl. Sm. 182—183° (B. 36, 4073 C. 1904 [1] 267).
- $C_{28}H_{23}O_2N_3$  4) 3'-Acetylamido-2'-Methyl-9-[4-Acetylamidophenyl]-1,2-Naphtakridin. Sm. 354° (C. 1903 [1] 884).
- $C_{23}H_{24}ON_2$  5)  $\alpha$ -Acetyl- $\alpha$ -Diphenylmethyl- $\beta$ -Diphenylmethylenhydrazin. Sm. 145° (J. pr. [2] 67, 178 C. 1903 [1] 874).
- $C_{28}H_{24}OS$  1) Benzyläther d.  $\gamma$ -Keto- $\alpha$ -Merkapto- $\alpha\beta\gamma$ -Triphenylpropan. Sm. 207° (B. 37, 505 C. 1904 [1] 882).
- $C_{28}H_{24}O_2N_2$  \*16) 1,4-Di[4-Methylphenylamido]-9,10-Dioxyanthracen (C. 1904 [2] 339).
- 17) 1,5-Di[4-Methylphenylamido]-9,10-Dioxyanthracen. Sm. 207° (C. 1904 [2] 340).
- 18) Di[Phenylamid] d.  $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. (B. 37, 3218 C. 1904 [2] 1120).
- $C_{28}H_{24}O_2N_4$  2)  $\alpha$ -Imido- $\alpha$ -Benzoylamido- $\alpha$ -[ $\beta$ -Benzoyl- $\beta$ -Phenyl- $\alpha$ -4-Methylphenylhydrazido]methan. Sm. 279° (Ann. 29, 81 C. 1903 [1] 523).
- 3) Dimethyläther d. 1,4-Diphenyl-3,6-Di[4-Oxyphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 173,5—174,5° (B. 36, 371 C. 1903 [1] 577).
- $C_{38}H_{24}O_3N_2$  \*4) Dibenzoylderivat d. 4-Dimethylamido-3'-Oxydiphenylamin. Sm. 112° (J. pr. [2] 69, 236 C. 1904 [1] 1269).
- \*5) Dibenzoylderivat d. 4-Dimethylamido-4'-Oxydiphenylamin. Sm. 210° (J. pr. [2] 69, 165 C. 1904 [1] 1268).
- 12) 4,4'-Di[4-Methoxylbenzylidenamido]-2-Oxybiphenyl. Sm. 200° (B. 36, 4114 C. 1904 [1] 272).
- 13) 3-Aethyläther d. 4,4'-Di[2-Oxybenzylidenamido]-3-Oxybiphenyl. Sm. 136—137° (B. 36, 4073 C. 1904 [1] 267).
- $C_{28}H_{24}O_5S$  1)  $\alpha$ -Keto- $\gamma$ -Benzylsulfon- $\alpha\beta\gamma$ -Triphenylpropan. Sm. 252—254° (B. 37, 506 C. 1904 [1] 882).
- $C_{28}H_{24}O_7N_2$  \*1) Orcein (M. 24, 902 C. 1904 [1] 513).
- $C_{28}H_{24}N_2S_6$  1) Dibenzyläther d. Di[Phenylimidomerkaptomethyl]disulfid. Sm. 121° (B. 36, 2265 C. 1903 [2] 562).
- $C_{28}H_{25}O_5N$  C 73,8 — H 5,5 — O 17,6 — N 3,1 — M. G. 455.
- 1) Benzoyldehydrocorybulbin. Sm. 173—174°.  $HCl + 2H_2O + CHCl_3$ , + Aceton (Ar. 241, 642 C. 1904 [1] 181).
- $C_{28}H_{26}ON_2$  C 82,8 — H 6,4 — O 3,9 — N 6,9 — M. G. 406.
- 1)  $\alpha$ -Acetyl- $\alpha\beta$ -Di[Diphenylmethyl]hydrazin. Sm. 158° (J. pr. [2] 67, 188 C. 1903 [1] 875).
- $C_{28}H_{26}O_2N_4$  \*4) Dimethyläther d. Dehydro-4-Oxybenzalphenylhydrazon. Sm. 197 bis 198° (B. 36, 68 C. 1903 [1] 451).

- $C_{25}H_{26}O_2N_4$  12) Diäthyläther d. 4,4'-Di[4-Oxyphenylazo]biphenyl. Sm. 252—253° (B. 36, 2974 C. 1903 [2] 1031).
- $C_{28}H_{28}N_5J$  \*1) Jodmethylat d. Base  $C_{27}H_{23}N_5$ . (J. pr. [2] 66, 576 C. 1903 [1] 589).
- $C_{28}H_{28}ON_2$  2) 4-Diäthylamidophenyl-4-[4-Methylphenyl]amido-1-Naphtylketon. Sm. 176—177° (B. 37, 1903 C. 1904 [2] 115).
- $C_{28}H_{28}ON$  C 85,0 — H 7,3 — O 4,1 — N 3,5 — M. G. 395.
- 1)  $\gamma$ -Keto- $\gamma$ -[4-Isopropylbenzylidenamidophenyl]- $\alpha$ -[4-Isopropylphenyl]propen. Sm. 128° (B. 37, 394 C. 1904 [1] 657).
- $C_{28}H_{30}O_3N_2$  2) s-Tetraäthylrhodamin (D. R. P. 44002, 48367, 81056, 87028, 89092). — \*III, 575.
- $C_{28}H_{30}O_{10}N_4$  \*1) 4,4'-Biphenyldihydrazon d. Oxalessigsäurediäthylester (Bl. [3] 31, 87 C. 1904 [1] 580).
- $C_{28}H_{30}N_8$  1) Chlorid d.  $\alpha$ -Oxy- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]- $\alpha$ -[4-Methylamido-1-Naphtyl]methan (B. 37, 1912 C. 1904 [2] 115).
- 2) Chlormethylat d.  $\alpha$ -Phenylimido- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha$ -[4-Aethylamido-1-Naphtyl]methan (B. 37, 1904 C. 1904 [2] 116).
- $C_{28}H_{30}N_8J$  1) Jodmethylat d.  $\alpha$ -[4-Dimethylamidophenyl]- $\alpha\alpha$ -Di[2-Methyl-3-Indolyl]methan. Sm. 181—182° (B. 37, 323 C. 1904 [1] 668).
- $C_{28}H_{31}O_2N_3$  2) Imid d. s-Tetraäthylrhodamin. Sm. 229° (D. R. P. 81264). — \*III, 576.
- $C_{28}H_{31}N_4P$  1) Tri[2-Methylphenylamido]phosphin-2-Methylphenylimid. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (C. r. 138, 816 C. 1904 [1] 1204).
- $C_{28}H_{32}O_2N_2$  C 78,5 — H 7,5 — O 7,5 — N 6,5 — M. G. 428.
- 1) Lakton d.  $\alpha$ -Oxy-4,4'-Di[Diäthylamido]triphenylmethan-2''-Carbonsäure (Diäthylanilinphtalein). Sm. 128° (C. r. 126, 1251). — \*II, 1019.
- $C_{28}H_{35}O_2N_3$  C 75,5 — H 7,8 — O 7,2 — N 9,4 — M. G. 445.
- 1) Dimethylamid d. 4,4''-Di[Dimethylamido]-4-Oxytriphenylmethan-4-Aethyläther-2-Carbonsäure. Sm. 139—140° (A. 329, 75 C. 1903 [2] 1440).
- $C_{28}H_{35}O_3N_3$  C 72,9 — H 7,6 — O 10,4 — N 9,1 — M. G. 461.
- 1) Aethylester d.  $\alpha$ -Oxy-4,4''-Di[Dimethylamido]triphenylmethan- $\alpha$ -Aethyläther-2-Amidoameisensäure. Sm. 161—162° u. Zers. (B. 36, 2785 C. 1903 [2] 881).
- 2) Dimethylamid d. 4,4''-Di[Dimethylamido]- $\alpha$ ,4-Dioxytriphenylmethan-4-Aethyläther-2-Carbonsäure. Sm. 188° (A. 329, 79 C. 1903 [2] 1441).
- $C_{28}H_{40}O_4N_2$  \*1) Cephaelin (C. 1903 [1] 92).
- $C_{28}H_{40}O_5N_2$  C 69,4 — H 8,3 — O 16,5 — N 5,8 — M. G. 484.
- 1) Emetin. (HJ, J<sub>7</sub>) (C. 1898 [2] 1190). — \*III, 656.
- $C_{28}H_{42}O_4N_2$  C 71,5 — H 8,9 — O 13,6 — N 6,0 — M. G. 470.
- 1) Diisobutylderivat d. Yohimboasäure. Sm. 137—138° (B. 37, 1764 C. 1904 [1] 1527).
- $C_{28}H_{43}O_6N_3$  C 65,0 — H 8,3 — O 18,6 — N 8,1 — M. G. 517.
- 1) Verbindung (aus Cholesterin). Sm. 147—148° (C. 1903 [1] 814).
- $C_{28}H_{45}ON$  \*1) Phenylamid d. Behenolsäure. Sm. 72° (B. 36, 3602 C. 1903 [2] 1314).
- $C_{28}H_{46}O_9N$  C 62,2 — H 8,5 — O 26,6 — N 2,6 — M. G. 540.
- 1) Isopyrin. Sm. 160°. HCl, (2HCl, PtCl<sub>4</sub>) (C. 1903 [1] 650).
- $C_{28}H_{47}ON_3$  C 76,2 — H 10,7 — O 3,6 — N 9,5 — M. G. 441.
- 1) Semicarbazon d. Cholestenon. Sm. 240° (B. 37, 3100 C. 1904 [2] 1535).
- $C_{28}H_{47}O_4N$  C 72,9 — H 10,2 — O 13,9 — N 3,0 — M. G. 461.
- 1) Methyl ester d. Oximsäure  $C_{27}H_{45}O_4N$ . Sm. 148° (B. 37, 2030 C. 1904 [2] 184).
- $C_{28}H_{56}O_8N_{14}$  C 46,9 — H 7,8 — O 17,9 — N 27,4 — M. G. 716.
- 1) Clupeon. 2(2HCl, PtCl<sub>4</sub>) (H. 37, 109 C. 1903 [1] 236).

## — 28 IV —

- $C_{28}H_{10}O_4N_9Br_2$  1) Indanthren C. (B. 36, 931 C. 1903 [1] 1032).
- $C_{28}H_{13}O_4N_2Cl$  1) 4-Chlorindanthren (B. 36, 3436 C. 1903 [2] 1279).
- $C_{28}H_{18}O_2N_4S$  1) Phenylsulfondihydrochinoxalophenanthrazin. Sm. oberh. 300° (B. 36, 4044 C. 1904 [1] 183).
- 2) Phenylsulfondinaphthofluavin. Sm. oberh. 300° (B. 36, 4046 C. 1904 [1] 184).
- $C_{28}H_{20}O_4NCl$  1) Aethyläther d. 6-Chlor-3-[4-Oxyphenyl]amidofluoran. Sm. 192° (D. R. P. 85885). — \*III, 574.

- $C_{28}H_{22}O_6N_2S$  1) 1,4-Di[4-Methylphenylamido]-9,10-Anthrachinon-1<sup>2</sup>- oder -1<sup>3</sup>-Sulfonsäure (Alizarincyaningrün) (*C.* 1904 [1] 101; 1904 [2] 339).
- $C_{28}H_{22}O_8N_2S_2$  1) 1,4-Di[4-Methylphenylamido]-9,10-Anthrachinon-1<sup>2</sup>,6[oder 1<sup>3</sup>,6]-Disulfonsäure (Anthrachinongrün GX) (*C.* 1904 [2] 340).
- $C_{28}H_{22}O_{12}N_4S_2$  1) Disazoverbindung (aus 4,4'-Diamido-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure u. 2-Oxybenzol-1-Carbonsäure).  $Ba_2$  (*J. pr.* [2] 66, 567 *C.* 1903 [1] 519).
- $C_{28}H_{23}O_3N_2Br$  1) 7-Aethyläther d. 2,7-Dioxy-2,3-Diphenyl-1-[3-Bromphenyl]-1,2-Dihydro-1,4-Benzdiazin. Sm. 166—169° (*B.* 36, 3808 *C.* 1904 [1] 92).
- $C_{28}H_{24}O_2N_2S_2$  3) Di[4-(4-Methylphenyl)merkaptophenylamid] d. Oxalsäure (Dip-Thiotolyloxanilid). Sm. 242° (*J. pr.* [2] 68, 269 *C.* 1903 [2] 993).
- $C_{28}H_{24}O_2N_2Se_2$  1) Di[Diphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 123—124° (*Ar.* 241, 221 *C.* 1903 [2] 104).
- $C_{28}H_{24}O_8N_4S_2$  \*1) Aethylbrillantgelb (*B.* 36, 2976 *C.* 1903 [2] 1031).
- $C_{28}H_{26}ON_4S_2$  1) Aethyläther d. 4,4'-Di[ $\beta$ -Phenylthioureido]-3-Oxybiphenyl (*B.* 36, 4074 *C.* 1904 [1] 267).
- $C_{28}H_{27}O_4N_2Br_3$  1) Acetat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[Acetyl-4-Methylphenylamidomethyl]benzol. Sm. 154° (*B.* 37, 3910 *C.* 1904 [2] 1593).
- $C_{28}H_{28}O_4N_2S_2$  2) 3,3'-Di[Methyl-4-Methylphenylsulfonamido]biphenyl. Sm. 150° (*A.* 332, 61 *C.* 1904 [2] 41).
- 3) 4,4'-Di[Methyl-4-Methylphenylsulfonamido]biphenyl. Sm. 235° (*B.* 37, 3772 *C.* 1904 [2] 1548).
- $C_{28}H_{30}O_4NJ$  1) Benzozat d. Methylthebeninmethyllätherjodmethylat. Sm. 271° (*B.* 37, 2788 *C.* 1904 [2] 716).
- $C_{28}H_{30}N_6S_2Si$  1) Verbindung (aus Methylsenföhl u. Silicotetraphenylamid) (*Soc.* 83, 255 *C.* 1903 [1] 875).
- $C_{28}H_{32}N_4ClP$  4) Chlortetra[Benzylamido]phosphor. Sm. 208° (*A.* 326, 151 *C.* 1903 [1] 760).
- $C_{28}H_{38}O_4N_2J_2$  \*1) Diäthylester d. stab.  $\alpha\beta$ -Di[1,2,3,4-Tetrahydro-2-Isachinoly]-äthan-2,2'-Di[Jodammoniumessigsäure]. Sm. 1167 *C.* 1903 [1] 1187).
- \*2) Diäthylester d. lab.  $\alpha\beta$ -Di[1,2,3,4-Tetrahydro-2-Isochinoly]-äthan-2,2'-Di[Jodammoniumessigsäure]. Sm. 51—53° (*B.* 36, 1168 *C.* 1903 [1] 1187).

**C<sub>29</sub>-Gruppe.**

- $C_{29}H_{22}$  \*1) 2,3,4,5-Tetraphenyl-R-Penten. Sm. 177—178° (*B.* 36, 936 *C.* 1903 [1] 1020).

## — 29 II —

- $C_{29}H_{18}O_6$  3) Dibenzoat d. 5,6-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran. Sm. 192,5—194° (*B.* 29, 2432). — \*III, 532.
- $C_{29}H_{22}O_{12}$  C 61,9 — H 3,9 — O 34,2 — M. G. 562.
- 1) Pentaacetat d. 2,3,7-Trioxy-9-[3,4-Dioxyphenyl]fluoron. Sm. 227 bis 231° (*B.* 37, 2733 *C.* 1904 [2] 542).
- $C_{29}H_{24}O_8$  C 82,9 — H 5,7 — O 11,4 — M. G. 420.
- 1) Benzozat d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\beta\delta$ -Triphenylbutan. Sm. 147—149° (*M.* 24, 723 *C.* 1904 [1] 167).
- $C_{29}H_{24}O_8$  \*3) Methylendicocoin. Sm. 128° (*A.* 329, 276 *C.* 1904 [1] 795).
- $C_{29}H_{24}O_{14}$  C 53,4 — H 4,0 — O 37,6 — M. G. 596.
- 1) Cetratasäure. Sm. 178—180° (*J. pr.* [2] 68, 44 *C.* 1903 [2] 512).
- $C_{29}H_{26}O_2$  3) 1,2-Dioxy-1,2,3,4-Tetraphenyl-R-Pentamethylen. Sm. 171° (*B.* 36, 936 *C.* 1903 [1] 1020).
- 4) Acetat d. 5-Oxy-1,2-Diphenyl-3-[4-Isopropylphenyl]benzol. Sm. 98° (*Am.* 31, 146 *C.* 1904 [1] 806).
- $C_{29}H_{27}N_3$  C 83,4 — H 6,5 — N 10,1 — M. G. 417.
- 1) 2,8-Di[Benzylamido]-3,7-Dimethylakridin (D.R.P. 141297 *C.* 1903 [1] 1163).

- $C_{29}H_{28}O_6$  \*1) Diäthylester d.  $\alpha\delta$ -Diketo- $\alpha\gamma\delta$ -Triphenylpentan- $\beta\delta$ -Dicarbonsäure (Enolform). Sm. 115—116° (95° u. Zers.) (Soc. 83, 721 C. 1903 [2] 54; G. 33 [2] 148 C. 1903 [2] 1270).
- 2) Diäthylester d. isom.  $\alpha\delta$ -Diketo- $\alpha\gamma\delta$ -Triphenylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 93—94° (G. 33 [2] 149 C. 1903 [2] 1270).
- 3) Diäthylester d. isom.  $\alpha\delta$ -Diketo- $\alpha\gamma\delta$ -Triphenylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 132° (G. 33 [2] 149 C. 1903 [2] 1270).
- $C_{29}H_{30}N_2$  C 85,7 — H 7,4 — N 6,9 — M. G. 406.
- 1) Di[Dibenzylamido]methan. Sm. 97° (B. 36, 1199 C. 1903 [1] 1215).
- 2) 4,4'-Di[Methylbenzylamidophenyl]methan. Sm. 50°. Pikrat (D.R.P. 68665; B. 37, 2676 C. 1904 [2] 443).
- 3) Phenylimido- $\alpha$ -Phenylamidobenzylidenecampher. Sm. 117—118° (Soc. 83, 105 C. 1903 [1] 233, 458).
- $C_{29}H_{32}O_{12}$  2) Hexaacetat d. Di[2,4,6-Trioxy-3,5-Dimethylphenyl]methan. Sm. 232—233° (M. 25, 671 C. 1904 [2] 1145).
- $C_{29}H_{32}N_4$  3) Di[6-Amido-4-Benzylamido-3-Methylphenyl]methan. Sm. 157° (D.R.P. 141297 C. 1903 [1] 1163).
- $C_{29}H_{33}N_3$  C 82,3 — H 7,8 — N 9,9 — M. G. 423.
- 1) Di[4-Dimethylamidophenyl]-4-Aethylamido-1-Naphtylketon. Sm. 172—173° (C. 1903 [1] 87; B. 37, 1908 C. 1904 [2] 115).
- 2) Di[4-Dimethylamidophenyl]-4-Dimethylamido-1-Naphtylmethan. Sm. 172° (C. 1903 [1] 87).
- $C_{29}H_{38}O_{10}$  C 64,0 — H 6,6 — O 29,4 — M. G. 544.
- 1) Diacetat d. Aspidin. Sm. 108° (A. 329, 328 C. 1904 [1] 800).
- $C_{29}H_{44}O_2$  2) Aethyläther d. Oxycholestenon. Sm. 165° (C. 1903 [1] 815).
- $C_{29}H_{44}O_{18}$  C 58,0 — H 7,3 — O 34,7 — M. G. 600.
- 1) Abyssinin (C. 1903 [1] 1425).
- $C_{29}H_{46}O_8$  C 78,7 — H 10,4 — O 10,9 — M. G. 442.
- 1) Acetat d. Cholestanonol. Sm. 127° (128°) (M. 24, 653 C. 1903 [2] 1235; B. 36, 3755 C. 1903 [2] 1417).
- $C_{29}H_{46}O_5$  2) Dimethylester d. Säure  $C_{27}H_{42}O_5$ . Sm. 113—114° (B. 36, 3757 C. 1903 [2] 1418).
- $C_{29}H_{48}O_2$  C 81,3 — H 11,2 — O 7,5 — M. G. 428.
- 1) Propionat d. Phytosterin. Sm. 102,5—103,5° (C. 1903 [2] 125).
- 2) Verbindung (aus Asclepias syriaca L.). Sm. 55—60° (J. pr. [2] 68, 402 C. 1904 [1] 105).
- $C_{29}H_{49}O_8$  C 78,4 — H 10,8 — O 10,8 — M. G. 444.
- 1) Verbindung (aus Asclepias syriaca L.) oder  $C_{30}H_{50}O_8$ . Sm. 71—75° (J. pr. [2] 68, 452 C. 1904 [1] 191).
- $C_{29}H_{48}O_4$  2) Dimethylester d. Säure  $C_{27}H_{44}O_4$  (aus Cholesterin). Sm. 69° (B. 37, 3097 C. 1904 [2] 1535).
- 3) Monoäthylester d. Säure  $C_{27}H_{44}O_4$  (aus Cholesterin). Sm. 151° (corr.) (B. 36, 3181 C. 1903 [2] 936; B. 37, 3097 C. 1904 [2] 1535).

## — 29 III —

- $C_{29}H_{20}O_3N_2$  C 78,4 — H 4,5 — O 10,8 — N 6,3 — M. G. 444.
- 1) Azin (aus Benzoylmethylmorpholchinon u. o-Toluyldiamin) (B. 31, 3202). — \*III, 322.
- $C_{29}H_{20}O_4N_2$  C 75,7 — H 4,3 — O 13,9 — N 6,1 — M. G. 460.
- 1) Dibenzoylderivat d. 4-Oxy-5-Keto-1,3-Diphenyl-4,5-Dihydropyrazol (B. 36, 1137 C. 1903 [1] 1254).
- $C_{29}H_{20}N_2S$  1) s-Di[9-Phenanthryl]thioharnstoff. Sm. 229° (B. 36, 2516 C. 1903 [2] 507).
- $C_{29}H_{23}ON$  4) 4-Dimethylamidophenyldinaphtopyran. Sm. 207—208° (C. r. 138, 576 C. 1904 [1] 957).
- $C_{29}H_{23}O_4N_3$  C 72,9 — H 4,8 — O 13,4 — N 8,8 — M. G. 477.
- 1) Di[Diphenylamid] d. Acetoximidomalonsäure. Sm. 190° (C. 1904 [1] 1555).
- $C_{29}H_{24}ON_2$  2) N-[2,4,6-Trimethylphenyl]- $\alpha'$ -Phenylpyrophtalin. Sm. 230° (B. 36, 3923 C. 1904 [1] 98).
- $C_{29}H_{24}ON_4$  2) 4,4'-Di[Methylcyanamido]-4''-Oxytetraphenylmethan. Sm. 205° (B. 37, 643 C. 1904 [1] 951).

- $C_{29}H_{24}O_8N_2$  \*1) 4,4'-Di[Methylbenzoylamidophenyl]keton. Sm. 204° (102°?) (B. 37, 2677 C. 1904 [2] 444).
- $C_{29}H_{26}O_3N_3$  C 75,2 — H 5,4 — O 10,3 — N 9,1 — M. G. 463.  
1) Di[Diphenylamid] d. Aethoximidomalonsäure. Sm. 164—165° (C. 1904 [1] 1555).
- $C_{29}H_{26}N_6Br$  1) Verbindung (aus Pyridin u. Amidoazobenzol). Sm. 159° (J. pr. [2] 69, 132 C. 1904 [1] 816).
- $C_{29}H_{26}OS_2$  2) Diphenyläther d.  $\alpha$ -Keto- $\gamma$ -Dimerkapto- $\alpha$ -Diphenylpentan. Sm. 102° (B. 37, 510 C. 1904 [1] 884).
- $C_{29}H_{26}O_2N_2$  5) Di[Benzoyl-4-Methylphenylamido]methan (B. 37, 3117 C. 1904 [2] 1316).  
6)  $\alpha$ -Benzoyl- $\beta$ -[4-Methylbenzoyl]- $\alpha$ -Di[2-Methylphenyl]hydrazin. Sm. 182° (C. r. 137, 714 C. 1903 [2] 1428).  
7) 7-Aethyläther d. 2,7-Dioxy-2,3-Diphenyl-1-[2-Methylphenyl]-1,2-Dihydro-1,4-Benziazin. Sm. 172° (B. 36, 3863 C. 1904 [1] 91).
- $C_{29}H_{26}O_3N_2$  C 77,3 — H 5,8 — O 10,7 — N 6,2 — M. G. 450.  
1) Trimethyläther d. 4,4'-Di[4-Oxybenzylidenamido]-2-Oxybiphenyl. Sm. 150° (B. 36, 4078 C. 1904 [1] 268).
- $C_{29}H_{26}O_4N_2$  C 74,7 — H 5,6 — O 13,7 — N 6,0 — M. G. 466.  
1)  $\beta\beta$ -Di[ $\beta$ -2-Oxybenzylidenamido-4-Oxyphenyl]propan (C. 1904 [2] 1737).  
C 67,3 — H 5,2 — O 24,8 — N 2,7 — M. G. 517.
- $C_{29}H_{27}O_8N$  1) Diäthylester d.  $\alpha$ -Diketo- $\gamma$ -[3-Nitrophenyl]- $\alpha$ -Diphenylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 128—129° (Soc. 83, 722 C. 1903 [2] 55).
- $C_{29}H_{27}N_4Cl$  1) Verbindung (aus Benzidin u. 2,4-Dinitrophenylpyridinchlorid). Sm. 179—180° (J. pr. [2] 68, 261 C. 1903 [2] 1064).
- $C_{29}H_{28}ON_2$  5) 4,4'-Di[Methylbenzylamido]diphenylketon. Sm. 152° (I. R. P. 72808). — \*III, 150.
- $C_{29}H_{28}O_2N_4$  3) 4,4'-Di[ $\alpha$ -Methyl- $\beta$ -Phenylureidophenyl]methan. Sm. 186—187° (B. 37, 2675 C. 1904 [2] 443).
- $C_{29}H_{28}O_5N_8$  C 61,3 — H 4,9 — O 14,1 — N 19,7 — M. G. 568.  
1)  $\alpha$ -Oxydi[4'-Nitro-3-Methylamido-4-Methylazobenzol]methan? Sm. 168—169° (C. 1903 [1] 400).
- $C_{29}H_{28}O_6N_4$  C 65,9 — H 5,3 — O 18,2 — N 10,6 — M. G. 528.  
1) 2,2'-Dimethyläther d. Di[2,4,6-Trioxy-3,5-Diphenylazo-3-Methylphenyl]methan. Sm. 245° (A. 329, 285 C. 1904 [1] 796).  
2) Methylenbisbenzolazoflicinsäure. Sm. 223—224° (A. 329, 298 C. 1904 [1] 797).
- $C_{29}H_{28}N_2S_8$  1) Di[4-Methylphenyläther] d. s-Di[4-Merkapto-2-Methylphenyl]-thioharnstoff. Sm. 151° (J. pr. [2] 68, 286 C. 1903 [2] 995).
- $C_{29}H_{28}N_4S_2$  1) 4,4'-Di[ $\alpha$ -Methyl- $\beta$ -Phenylthioureidophenyl]methan. Sm. 153° (B. 37, 2676 C. 1904 [2] 443).
- $C_{29}H_{29}O_2N_3$  C 77,2 — H 6,4 — O 7,1 — N 9,3 — M. G. 451.  
1)  $\alpha$ -[2-Nitrophenyl]- $\alpha$ -Di[2-Methyl-1-Aethyl-3-Indolyl]methan. Sm. 220—221° (B. 37, 323 C. 1904 [1] 668).  
C 82,4 — H 7,1 — O 3,8 — N 6,6 — M. G. 422.
- $C_{29}H_{30}ON_2$  1)  $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Di[2-Methyl-1-Aethyl-3-Indolyl]methan. Sm. 229° (B. 37, 323 C. 1904 [1] 668).
- $C_{29}H_{30}O_4N_2$  2) 4,4'-Di[Diacetylamido]-3,3'-Dimethyltriphenylmethan. Sm. 165 bis 166° (C. 1904 [2] 227).
- $C_{29}H_{31}ON_3$  2) Di[4-Dimethylamidophenyl]-4-Acetylamido-1-Naphtylmethan. Sm. 228—229° (C. 1903 [1] 87; B. 37, 1908 C. 1904 [2] 115).
- $C_{29}H_{31}O_6Cl$  1) Chlorhydrin d. Dehydrodioxyparasantonsäuredibenzylester. Sm. 129—130° (C. 1903 [2] 1447).
- $C_{29}H_{32}O_2N_4$  C 74,4 — H 6,8 — O 6,8 — N 12,0 — M. G. 468.  
1) 4,4'-Di[4-Dimethylamidophenylamido]-2,2'-Dioxydiphenylmethan? Sm. 150° (J. pr. [2] 69, 240 C. 1904 [1] 1269).
- $C_{29}H_{32}N_8Cl$  1) Chlorid d.  $\alpha$ -Oxy- $\alpha$ -Di[4-Dimethylamidophenyl]- $\alpha$ -[4-Aethylamido-1-Naphtyl]methan (Neuvictoriablaul). Sm. 183—184° (B. 37, 1913 C. 1904 [2] 115).
- $C_{29}H_{36}O_6S_3$  1)  $\beta\zeta\zeta$ -Tribenzylsulfon- $\beta$ -Methylheptan. Sm. 158° (B. 37, 508 C. 1904 [1] 883).

- $C_{20}H_{37}O_5N_3$  C 73,3 — H 7,8 — O 10,1 — N 8,8 — M. G. 475.  
 1) Aethylester d.  $\alpha$ -Oxy-4',4''-Di[Dimethylamido]-3-Methyltriphenylmethan- $\alpha$ -Aethyläther-6-Amidoameisensäure. Sm. 170—172° u. Zers. (B. 36, 2781 C. 1903 [2] 881).  
 $C_{29}H_{40}O_{12}N_4$  C 54,7 — H 6,3 — O 30,2 — N 8,8 — M. G. 636.  
 1) Tetraäthylester d. Hippurylasparagylasparaginsäure. + Stickstoffwasserstoff (Sm. unterhalb 150°) (J. pr. [2] 70, 182 C. 1904 [2] 1397). C 52,2 — H 6,3 — O 28,8 — N 12,6 — M. G. 666.  
 $C_{20}H_{42}O_{12}N_6$  1) Hydrazitetrahydrazid d. Hippuryldiasparagylasparaginsäure. Sm. 175° u. Zers. (J. pr. [2] 70, 192 C. 1904 [2] 1398).  
 $C_{20}H_{45}O_4N$  C 73,9 — H 9,5 — O 13,6 — N 3,0 — M. G. 471.  
 1) Nitrocholesterylacetat. Sm. 101—102° (M. 24, 652 C. 1903 [2] 1235).  
 $C_{20}H_{45}O_5N$  C 71,4 — H 9,2 — O 16,4 — N 2,9 — M. G. 487.  
 1) Acetat d. Nitrooxycholesterin. Sm. 103—104° (C. 1903 [1] 814).  
 $C_{20}H_{47}O_6N$  C 71,1 — H 9,6 — O 16,4 — N 2,9 — M. G. 489.  
 1) Dimethylester d. Oximsäure  $C_{27}H_{48}O_5N$ . Sm. 76° (B. 36, 3758 C. 1903 [2] 1418).

## — 29 IV —

- $C_{20}H_{22}O_3NCl$  1) 6-Chlor-3-[2,4,6-Trimethylphenyl]amidofluoran. Sm. 160° (D.R.P. 85885). — \*III, 574.  
 $C_{20}H_{23}O_6N_2S$  1) 2-Pararosanilinnaphthalin-6-Sulfonsäure (C. 1904 [1] 1013).  
 $C_{20}H_{28}O_7NS_2$  1) 2-Naphtalinsulfonat d. 1- $\alpha$ -[2-Naphtylsulfon]amido- $\beta$ -[4-Oxyphenyl]propionsäure. Na (B. 36, 2605 C. 1903 [2] 619).  
 $C_{20}H_{41}O_2NBr_2$  1) N-Palmitylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 56—57° (A. 332, 203 C. 1904 [2] 211).  
 $C_{20}H_{40}O_3NJ$  1) Jodmethylat d. Isopyroin (C. 1903 [1] 650).

**C<sub>30</sub>-Gruppe.**

- $C_{30}H_{48}$  4) Kohlenwasserstoff (aus Guttapercha). Sd. 280—300°<sub>19</sub> (C. 1903 [1] 83).

## — 30 II —

- $C_{30}H_{18}O_8$  3) 5,6-Dibenzoat d. 5,6-Dioxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran-3,4-Methylenäther. Sm. 178° (B. 29, 2435). — \*III, 534.  
 $C_{30}H_{20}O_6$  2) Diacetat d. Resorcinanthrachinon (B. 36, 2023 C. 1903 [2] 378).  
 $C_{30}H_{20}O_7$  2) Aethylester d. 4,7-Dibenzoxyl-2-Phenyl-1,4-Benzpyran-4-Carbonsäure. Fl. (B. 34, 1953 C. 1903 [2] 296).  
 $C_{30}H_{22}O_8$  4) Acetat d. 4-Oxy-3-Methylphenyldinaphtopyran. Sm. 240° (C. r. 138, 283 C. 1904 [1] 730).  
 5) Acetat d. 6-Oxy-3-Methylphenyldinaphtopyran. Sm. 232—233° (C. r. 138, 284 C. 1904 [1] 730).  
 $C_{30}H_{22}O_6$  3) Diacetat d. 10-Keto-9,9-Di[4-Oxyphenyl]-9,10-Dihydroanthracen. Sm. 244° (B. 36, 2021 C. 1903 [2] 378).  
 $C_{30}H_{22}N_8$  C 72,8 — H 4,4 — N 22,7 — M. G. 494.  
 1) 1-[4,4'-Biphenylenazo]-2-Phenylimidazol. Zers. bei 260° (B. 37, 700 C. 1904 [1] 1562).  
 $C_{30}H_{24}O_2$  6) Aethyläther d. 6-Oxy-3-Methylphenyldinaphtopyran. Sm. 240 bis 241° (C. r. 138, 284 C. 1904 [1] 730).  
 7) 3,4-Dibenzoyl-1,2-Diphenyl-R-Tetramethylen. Sm. 134° (B. 37, 1147 C. 1904 [1] 1266).  
 8) Acetat d. 9-[ $\alpha$ -Oxybenzyl]-10-Benzylanthracen. Sm. 158° (M. 25, 804 C. 1904 [2] 1137).  
 $C_{30}H_{24}O_7$  C 72,6 — H 4,8 — O 22,6 — M. G. 496.  
 1) Dichrysarobin. Zers. oberh. 250° (Soc. 81, 1580 C. 1903 [1] 34, 167).  
 $C_{30}H_{26}O$  \*3) Aethyläther d. 9-[ $\alpha$ -Oxybenzyl]-10-Benzylanthracen. Sm. 197°.  
 4 + C<sub>6</sub>H<sub>6</sub> (Sm. 217°) (M. 25, 802 C. 1904 [2] 1137).  
 $C_{30}H_{26}O_{15}$  C 57,5 — H 4,1 — O 38,3 — M. G. 626.  
 1) Ramalinsäure. Sm. 240—245° (J. pr. [2] 68, 24 C. 1903 [2] 511).  
 $C_{30}H_{28}O_8$  2) Anchusasäure (Anchusaroth) (C. 1903 [1] 1041).

- $C_{30}H_{30}O$  C 88,7 — H 7,4 — O 3,9 — M. G. 406.  
 1) 5-Oxy-3-Phenyl-1,2-Di[4-Isopropylphenyl]benzol. Sm. 137° (*Am.* 31, 151 *C.* 1904 [1] 807).
- $C_{30}H_{30}O_8$  C 69,5 — H 5,8 — O 24,7 — M. G. 518.  
 1) Dimethyläther d. Tetrajuajakhydrochinon. Sm. 80° (*Bl.* [3] 31, 189 *C.* 1904 [1] 939).
- $C_{30}H_{30}O_{10}$  C 65,5 — H 5,4 — O 29,1 — M. G. 550.  
 1) Diacetat d. Verb.  $C_{28}H_{28}O_8$ . Sm. 80—95° (*R.* 22, 142 *C.* 1903 [2] 124).
- $C_{30}H_{32}O_2$  C 84,9 — H 7,5 — O 7,5 — M. G. 424.  
 1) 4-Keto-1-Oxy-2-Phenyl-1,6-Di[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 214° (*Am.* 31, 150 *C.* 1904 [1] 807).
- $C_{30}H_{32}O_7$  C 71,4 — H 6,3 — O 22,2 — M. G. 504.  
 1) Alkannasäure (Alkannaroth) (*C.* 1903 [1] 1041).
- $C_{30}H_{34}O_{10}$  2) Diacetylderivat d. Triäthylester  $C_{28}H_{30}O_8$ . Sm. 104° (*M.* 24, 85 *C.* 1903 [1] 769).
- $C_{30}H_{36}O_5$  C 75,3 — H 7,9 — O 16,7 — M. G. 478.  
 1) Anhydrid d. Desmotroposantonigen Säure (*G.* 25 [1] 541). — \*II, 978.
- $C_{30}H_{42}O_9$  C 65,9 — H 7,7 — O 26,4 — M. G. 546.  
 1) Photosantoninsäure. Sm. 258—260°. Ba, Ag<sub>2</sub> (*G.* 33 [2] 65 *C.* 1903 [2] 1182).
- $C_{30}H_{44}O$  2) Albanan. Sm. 61° (*Ar.* 241, 487, 489 *C.* 1903 [2] 1178).
- $C_{30}H_{44}O_2$  C 82,6 — H 10,1 — O 7,3 — M. G. 436.  
 1) Sphäritalan. Sm. 152° (*Ar.* 241, 484 *C.* 1903 [2] 1178; *C.* 1904 [1] 517).
- $C_{30}H_{44}O_8$  2) Isosphäritalan. Sm. 142° (*Ar.* 241, 489 *C.* 1903 [2] 1178).
- $C_{30}H_{44}O_{16}$  C 67,7 — H 8,3 — O 24,0 — M. G. 532.  
 1) Alkannagrün (*C.* 1903 [1] 1041).
- $C_{30}H_{46}O_9$  3) Oktoäthylester d. Hexahydrobenzol-1,1,2,2,4,4,5,5-Oktocarbonsäure. Sm. 46° (*Soc.* 83, 782 *C.* 1903 [2] 201, 439).
- $C_{30}H_{46}O_9$  1) Verbindung (aus Guttapercha) =  $(C_{30}H_{45}O_3)_x$ . Sm. 144° (*C.* 1903 [1] 84).
- $C_{30}H_{46}O_{12}$  \*1) Quabaïn + 9H<sub>2</sub>O (Strophantin). Sm. 187—188° (*C.* 1904 [1] 1277).
- $C_{30}H_{48}O_2$  4) Amyrinsäure. Sm. 126—127° (*Ar.* 242, 361 *C.* 1904 [2] 527).
- $C_{30}H_{48}O_3$  3) Gratiolon. Na (*Ar.* 240, 567 *C.* 1903 [1] 42).
- 4) Verbindung (aus Ficus magnol. Borei). Sm. 115° (*B.* 37, 3847 *C.* 1904 [2] 1613).
- 5) Verbindung (aus Guttapercha) oder  $C_{40}H_{64}O_4$ . Sm. 160° (*C.* 1903 [1] 84).
- $C_{30}H_{48}O_{13}$  2) Accantherin (*C.* 1903 [2] 886).
- $C_{30}H_{50}O$  \*1)  $\alpha$ -Amyrin. Sm. 181° (*Ar.* 241, 155 *C.* 1903 [1] 1029; *Ar.* 242, 119 *C.* 1904 [1] 1011).
- \*2)  $\beta$ -Amyrin. Sm. 192° (*Ar.* 241, 155 *C.* 1903 [1] 1029; *J. pr.* [2] 68, 451 *C.* 1904 [1] 191; *Ar.* 242, 120 *C.* 1904 [1] 1011).
- $C_{30}H_{50}O_2$  \*6) Propionat d. Cholesterin. Sm. 98° (*B.* 37, 3424 *C.* 1904 [2] 1295).
- $C_{30}H_{50}O_8$  C 71,1 — H 9,9 — O 19,0 — M. G. 506.  
 1) Sapogenin (*Ar.* 241, 615 *C.* 1904 [1] 169).
- 2) 1-Dimenthylester d.  $\beta\zeta$ -Diketo- $\delta$ -Methylheptan- $\gamma\epsilon$ -Dicarbonsäure. Sm. 194—196° (*Soc.* 85, 51 *C.* 1904 [1] 360, 788).
- $C_{30}H_{50}O_{13}$  C 58,2 — H 8,1 — O 33,7 — M. G. 618.  
 1) Hemipolylaktid. Sm. 165° (*Bl.* [3] 31, 312 *C.* 1904 [1] 1134).
- $C_{30}H_{52}O_4$  C 74,7 — H 12,0 — O 13,3 — M. G. 482.  
 1) Dimyristat d.  $\alpha\beta$ -Dioxyäthan. Sm. 64°; Sd. 208° (*B.* 36, 4340 *C.* 1904 [1] 433).
- 30 III —
- $C_{30}H_{20}O_2N_2$  3) 4-[2-Naphtylazo]-3,3'-Dioxy-2,2'-Binaphtyl (*C. r.* 138, 1618 *C.* 1904 [2] 338).
- $C_{30}H_{21}OP$  1) Tri[1-Naphtyl]phosphinoxid (*C. r.* 139, 675 *C.* 1904 [2] 1638).
- $C_{30}H_{21}O_5B$  \*1) Tri[2-Naphtylester] d. Borsäure. Sm. 116° (*B.* 36, 2223 *C.* 1903 [2] 420).
- 2) Tri[1-Naphtylester] d. Borsäure. Sm. 84—85° (*B.* 36, 2222 *C.* 1903 [2] 420).

- $C_{80}H_{22}O_6N_2$  C 71,2 — H 4,3 — O 19,0 — N 5,5 — M. G. 306.  
 1) Bisnitrosodibenzoylmethan. Sm. 125° u. Zers. (B. 37, 1530 C. 1904 [1] 1608).  
 2)  $\alpha\beta$ -Di[2-o-Oxybenzylidenamidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (A. 332, 276 C. 1904 [2] 701).
- $C_{80}H_{22}O_6N_6$  C 64,0 — H 3,9 — O 17,1 — N 14,9 — M. G. 562.  
 1)  $\alpha\gamma$ -Di[4-Nitrophenylhydrazon]- $\beta$ -Phtalyl- $\alpha$ -Phenylbutan. Sm. 243° (B. 37, 581 C. 1904 [1] 939).
- $C_{80}H_{28}ON$  \* 3) 2, 3, 4-Triphenyl-3, 4-Dihydro-1, 3- $\alpha$ -Naphtisoxazin. Sm. 158° (C. r. 138, 1612 C. 1904 [2] 345).
- $C_{80}H_{24}O_2N_4$  4)  $\alpha\gamma$ -Di[Phenylhydrazon]- $\beta$ -Phtalyl- $\alpha$ -Phenylbutan. Sm. 181° (B. 37, 580 C. 1904 [1] 939).
- $C_{80}H_{24}O_4N_4$  2) 4, 8-Di[Acetylamido]-1, 5-Di[Phenylamido]-9, 10-Anthrachinon. Sm. oberh. 300° (D. R. P. 148767 C. 1904 [1] 557).
- $C_{80}H_{24}O_4S_2$  1) Di[4-Aethoxylphenyläther] d. 1, 8-Dimerkapto-9, 10-Anthrachinon. Sm. 251° (D. R. P. 116951 C. 1901 [1] 210). — \*III, 308.
- $C_{80}H_{24}O_6N_4$  2) 2-Dinitro-1, 5-Di[2, 4-Dimethylphenylamido]-9, 10-Anthrachinon (D. R. P. 142512 C. 1903 [2] 84).
- $C_{80}H_{24}O_{13}N_6$  C 53,3 — H 3,5 — O 30,8 — N 12,4 — M. G. 676.  
 1) Verbindung (aus Benzalacetophenon). Zers. bei 125—130° (A. 328, 222 C. 1903 [2] 998).
- $C_{80}H_{26}O_6N_2$  C 70,6 — H 5,1 — O 18,8 — N 5,5 — M. G. 510.  
 1) Verbindung (aus Benzalnitroacetophenon). Sm. 218° u. Zers. (B. 36, 3019 C. 1903 [2] 1001).
- $C_{80}H_{27}OCl$  1) Verbindung (aus  $\beta$ -Chlor- $\alpha\gamma$ -Diphenylpropen). Sm. 197° (B. 37, 1144 C. 1904 [1] 1266).
- $C_{80}H_{28}ON_2$  C 83,3 — H 6,5 — O 3,7 — N 6,5 — M. G. 432.  
 1) 9, 9-Di[4-Dimethylamidophenyl]-10-Keto-9, 10-Dihydroanthracen. Sm. 278° (C. r. 136, 536 C. 1903 [1] 837).
- $C_{80}H_{28}O_2N_2$  11) 4, 4'-Di[Benzoyläthylamido]biphenyl. Sm. 184,5—185,5 (C. 1903 [1] 1128; B. 35, 4184 C. 1903 [1] 143).  
 12) 3, 4-Methylenäther d.  $\alpha$ -[3, 4-Dioxyphenyl]- $\alpha\alpha$ -Di[2-Methyl-1-Aethyl-3-Indolyl]methan. Sm. 175° (B. 37, 323 C. 1904 [1] 668).
- $C_{80}H_{28}O_2N_4$  4) 1, 5-Di[Methylamido]-4, 8-Di[4-Methylphenylamido]-9, 10-Anthrachinon (D. R. P. 139581 C. 1903 [1] 680).
- $C_{80}H_{28}O_3N_2$  5) 3-Aethyläther d. 4, 4'-Di[4-Methoxybenzylidenamido]-3-Oxybiphenyl. Sm. 146—147° (B. 36, 4073 C. 1904 [1] 267).
- $C_{80}H_{28}N_4S$  1) 3, 5-Di[4-Methylphenylimido]-2, 4-Diphenyltetrahydro-1, 2, 4-Thio-diazol. Sm. 139° (B. 36, 3133 C. 1903 [2] 1071).
- $C_{80}H_{29}ON_3$  C 80,5 — H 6,5 — O 3,6 — N 9,4 — M. G. 447.  
 1) Hydroxylaminderivat d. Base  $C_{80}H_{30}O_2N_2$ . Sm. 210° (C. r. 137, 608 C. 1903 [2] 1180).
- $C_{80}H_{29}O_6N$  C 65,8 — H 5,3 — O 26,3 — N 2,6 — M. G. 547.  
 1) Alumidin. Sm. 234° (C. 1903 [1] 1142).
- $C_{80}H_{29}O_{11}N_3$  C 59,3 — H 4,8 — O 29,0 — N 6,9 — M. G. 607.  
 1) Diäthylester d.  $\beta$ -Keto- $\alpha\alpha\gamma$ -Tri[4-Nitrobenzyl]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 167,5—168,5° (B. 37, 1995 C. 1904 [2] 27).
- $C_{80}H_{30}O_2N_2$  C 80,0 — H 6,7 — O 7,1 — N 6,2 — M. G. 450.  
 1) 2-Dimethylamido-9, 10-Dioxy-9-Phenyl-10-[4-Dimethylamidophenyl]-9, 10-Dihydroanthracen. Sm. 140° (C. r. 137, 608 C. 1903 [2] 1180).
- $C_{80}H_{30}O_6N_2$  C 70,0 — H 5,8 — O 18,7 — N 5,4 — M. G. 314.  
 1) Dibenzoylisatyd. Sm. 186° (B. 37, 945 C. 1904 [1] 1217).
- $C_{80}H_{30}O_6N_4$  C 66,4 — H 5,5 — O 17,7 — N 10,3 — M. G. 542.  
 1) Verbindung (aus Anisylnitroformaldehydrazon). Sm. 219—220° (B. 36, 365 Anm. C. 1903 [1] 577).
- $C_{80}H_{31}O_8N_3$  C 64,2 — H 5,5 — O 22,8 — N 7,5 — M. G. 561.  
 1) Triäthylester d. 2, 5-Dimethylpyrrol-1-Phenylazobenzoylbrenztraubensäure-3, 4-Dicarbonsäure. Sm. 122° (B. 36, 396 C. 1903 [1] 723).
- $C_{80}H_{32}O_6N_2$  C 72,0 — H 6,4 — O 16,0 — N 5,6 — M. G. 500.  
 1) Casimirin. Sm. 106° (Ar. 241, 172 C. 1903 [2] 125).

- $C_{30}H_{33}O_3N$  C 82,0 — H 7,5 — O 7,3 — N 3,2 — M. G. 439.  
 1) 4-Oximido-1-Oxy-2-Phenyl-1,6-Di[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 208° (*Am.* 31, 150 *C.* 1904 [1] 807).
- $C_{30}H_{36}O_5N_2$  2) Verbindung (aus Parasantoninhydroxamsäure). Sm. 258° (*C.* 1903 [2] 1377).
- $C_{30}H_{38}O_3N_2$  2) Aethylester d.  $\alpha$ -Oxy-4,4'-Di[Diäthylamid]triphenylmethan-2''-Carbonsäure (D.R.P. 98863). — \*II, 1019.  
 C 68,7 — H 7,6 — O 18,3 — N 5,3 — M. G. 524.
- $C_{30}H_{40}O_6N_2$  1) Hydrazon d. Santonsäure. Sm. 206–207° (*G.* 33 [1] 198 *C.* 1903 [2] 45).
- $C_{30}H_{42}O_8N_2$  C 64,5 — H 7,5 — O 22,9 — N 5,0 — M. G. 558.  
 1) Sesquicamphorylhydroxylamin. Sm. 256° (*C.* 1903 [1] 1410; *Soc.* 83, 954 *C.* 1903 [2] 665).
- $C_{30}H_{42}O_{13}N_4$  C 54,0 — H 6,3 — O 31,2 — N 8,4 — M. G. 666.  
 1) Nukleotin.  $Ba_4 + 11H_2O$  (*C.* 1904 [2] 134).
- $C_{30}H_{44}O_4N_3$  \*1) Emetin (*C.* 1903 [1] 92).
- $C_{30}H_{46}O_4Cl_4$  1) Dilaurat d. 2,3,5,6-Tetrachlor-1,4-Dioxybenzol. Sm. 83–84° (*Bl.* [3] 29, 1123 *C.* 1904 [1] 259).
- $C_{30}H_{47}O_5N$  C 79,5 — H 10,4 — O 7,0 — N 3,1 — M. G. 453.  
 1) Acetylphenylamid d. Behenolsäure. Sm. 45° (*B.* 36, 3602 *C.* 1903 [2] 1314).
- $C_{30}H_{57}O_6N_{17}$  \*1) Salmin. 2(2HCl, PtCl<sub>4</sub>) (*H.* 37, 95 *C.* 1903 [1] 236).
- $C_{30}H_{52}O_9N_{14}$  C 47,2 — H 8,1 — O 18,9 — N 25,7 — M. G. 762.  
 1) Clupein. 2(2HCl, PtCl<sub>4</sub>) (*H.* 37, 99 *C.* 1903 [1] 236).

## — 30 IV —

- $C_{80}H_{18}O_3NCl$  1) 6-Chlor-3-[1-Naphtyl]amidofluoran. Sm. 196° (D.R.P. 85885). — \*III, 574.  
 2) 6-Chlor-3-[2-Naphtyl]amidofluoran. Sm. 216° (D.R.P. 85885). — \*III, 574.
- $C_{80}H_{21}O_7NS_3$  1)  $\alpha$ -Trinaphtalinsulfhydroxylamin. Zers. bei 270–280° (*G.* 33 [2] 311 *C.* 1904 [1] 288).
- $C_{80}H_{22}O_2N_4Br_2$  1)  $\alpha\gamma$ -Di[4-Bromphenylhydrazon]- $\beta$ -Phtalyl- $\alpha$ -Phenylbutan. Sm. 201° (*B.* 37, 581 *C.* 1904 [1] 940).
- $C_{80}H_{22}O_6NCl_3$  1) Tri[4-Chlorbenzoyl]adrenalin. Sm. 75° (*B.* 37, 4151 *C.* 1904 [2] 1744).
- $C_{80}H_{27}O_6ClSi$  1) Tribenzoylacetonylsiliciumchlorid. + FeCl<sub>3</sub>, + AuCl<sub>3</sub> (*B.* 36, 1596 *C.* 1903 [2] 30).
- $C_{80}H_{28}O_2N_2S_2$  3) Di[4-(4-Methylphenyl)merkapt-2-Methylphenylamid] d. Oxalsäure. Sm. 198–199° (*J. pr.* [2] 68, 284 *C.* 1903 [2] 995).  
 4) Di[4-(4-Methylphenyl)merkapt-3-Methylphenylamid] d. Oxalsäure. Sm. 207° (*J. pr.* [2] 68, 291 *C.* 1903 [2] 995).
- $C_{80}H_{28}O_2N_2Se_2$  1) Di[Phenylbenzylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 81° (*Ar.* 241, 220 *C.* 1903 [2] 104).
- $C_{80}H_{28}O_8N_4S_2$  1) Chrysopheninsäure. Na<sub>2</sub> (*B.* 36, 2975 *C.* 1903 [2] 1031).  
 2) Diäthylbrillantgelb (*B.* 36, 2976 *C.* 1903 [2] 1031).
- $C_{80}H_{30}O_4N_8S$  1) Tetra[Phenylhydrazid] d. Dimethylsulfid- $\alpha\alpha\beta\beta$ -Tetracarbonsäure. Sm. 120° (*B.* 36, 3725 *C.* 1903 [2] 1416).
- $C_{80}H_{34}N_6S_2Si$  1) Verbindung (aus Aethylsenfö u. Siliketetraphenylamid) (*Soc.* 83, 254 *C.* 1903 [1] 572, 875).

**C<sub>31</sub>-Gruppe.**

- $C_{31}H_{34}$  \*1) Hentriakontan. Sm. 67–68° (*C.* 1903 [2] 893; 1904 [2] 1418).

## — 31 II —

- $C_{31}H_{20}O_2$  \*1) Naphtyloldinaphtopyran (Tri[2-Oxynaphtyl]methanoxyd). Sm. 273° (*C. r.* 137, 860 *C.* 1904 [1] 104).
- $C_{31}H_{22}O$  2) isom.  $\alpha$ -Oxytri[p-Naphtyl]methan (*B.* 37, 1638 *C.* 1904 [1] 1649).

- $C_{31}H_{24}O$  C 90,3 — H 5,8 — O 3,9 — M. G. 412.  
 1)  $\alpha$ -Keton (aus Anhydroacetondibenzil). Sm. 187—188° (Soc. 69, 744). — \*III, 206.  
 2)  $\beta$ -Keton (aus Anhydroacetondibenzil). Sm. 155—159° (Soc. 69, 744). — \*III, 206.
- $C_{31}H_{24}N_2$  3) 4-Phenylimido-1-[4-Phenylamidodiphenyl]methylen-1,4-Dihydrobenzol (p-Phenylamidofuchsonphenylimin). Sm. 166—168°. Pikrat (B. 37, 2866 C. 1904 [2] 776).
- $C_{31}H_{25}N_3$  2) Pentaphenylguanidin. Sm. 177—179°. (2HCl, PtCl<sub>4</sub>) (B. 37, 965 C. 1904 [1] 1002).
- $C_{31}H_{26}O_7$  C 73,0 — H 5,1 — O 21,9 — M. G. 510.  
 1) Methyläther d. Dichrysarobin. Sm. 160° (Soc. 81, 1582 C. 1903 [1] 34, 167).
- $C_{31}H_{27}N$  C 90,1 — H 6,5 — N 3,4 — M. G. 413.  
 1) Verbindung (aus 2-Keto-1,3-Dibenzyliden-R-Pentamethylen). Sm. 237° (B. 36, 1500 C. 1903 [1] 1351).
- $C_{31}H_{28}O_{10}$  C 66,4 — H 5,0 — O 28,6 — M. G. 560.  
 1) Nataloresinotannol-p-Cumarsäureester (Ar. 239, 238). — \*III, 418.  
 2) Ugandaaloresinotannol-p-Cumarsäureester (Ar. 239, 247). — \*III, 419.
- $C_{31}H_{30}O_{14}$  2) Pentaacetat d. Barbaloïn. Sm. 166,4° (C. 1903 [1] 234).
- $C_{31}H_{31}N_3$  2) 4-Dimethylamidophenyldi[4-Methylamido-1-Naphtyl]methan (B. 37, 1910 C. 1904 [2] 115).
- $C_{31}H_{38}O_{10}$  2) Diffusin. Sm. 135° (A. 327, 321 C. 1903 [2] 508).
- $C_{31}H_{42}O_2$  C 83,4 — H 9,4 — O 7,2 — M. G. 446.  
 1) Benzoat d. Alstol. Sm. 254° (B. 37, 4111 C. 1904 [2] 1656).
- $C_{31}H_{46}O_2$  C 82,7 — H 10,2 — O 7,1 — M. G. 450.  
 1) Verbindung (aus Asclepias syriaca L.). Sm. 135—136° (J. pr. [2] 68, 400 C. 1904 [1] 105).
- $C_{31}H_{50}O_6$  C 74,1 — H 10,0 — O 15,9 — M. G. 502.  
 1) Gratiogenin. Sm. 198° (Ar. 240, 566 C. 1903 [1] 42).
- $C_{31}H_{52}O_6$  C 71,5 — H 10,0 — O 18,5 — M. G. 520.  
 1) 1-Dimethylester d.  $\beta\zeta$ -Diketo- $\delta$ -Aethylheptan- $\gamma\epsilon$ -Dicarbonsäure. Sm. 201—207° (Soc. 85, 52 C. 1904 [1] 360, 788).

— 31 III —

- $C_{31}H_{23}ON$  C 87,5 — H 5,4 — O 3,7 — N 3,3 — M. G. 425.  
 1) Verbindung (aus Benzylidenacetophenon). Sm. 249° (B. 28, 962; Soc. 85, 1359 C. 1904 [2] 1646).
- $C_{31}H_{23}O_3N$  C 84,4 — H 5,2 — O 7,2 — N 3,2 — M. G. 441.  
 1) 2-Benzoyl-1,3-Diphenyl-1,3-Dihydro-4,2- $\beta$ -Naphthisoxazin. Sm. 224 bis 225° (G. 33 [1] 20 C. 1903 [1] 926).
- $C_{31}H_{24}O_2N_4$  \*1) Monobenzyläther d. 4,4'-Di[4-Oxyphenylazo]biphenyl (B. 36, 2975 C. 1903 [2] 1031).
- $C_{31}H_{25}O_4N$  C 78,3 — H 5,3 — O 13,5 — N 2,9 — M. G. 475.  
 1) Dibenzoat d. Apomorphin. Sm. 156—158° (B. 35, 4383 C. 1903 [1] 338).
- $C_{31}H_{25}O_7N$  C 71,1 — H 4,8 — O 21,4 — N 2,7 — M. G. 523.  
 1) Äthylester d. 6-Benzoylamido-3,5-Dibenzoxyl-1-Methylbenzol-2-Carbonsäure. Sm. 222,5° (B. 37, 1420 C. 1904 [1] 1417).
- $C_{31}H_{26}ON_2$  2) Nitrosoderivat d. Verb.  $C_{31}H_{27}N$ . Sm. 210—215° u. Zers. +  $C_2H_4O_2$  (B. 36, 1502 C. 1903 [1] 1351).
- $C_{31}H_{28}O_2N_2$  C 81,2 — H 5,7 — O 7,0 — N 6,1 — M. G. 458.  
 1)  $\gamma$ -Keto- $\alpha\beta\gamma$ -Triphenyl- $\alpha$ -[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-4-Pyrazolyl]propan. Sm. 201° (B. 36, 2128 C. 1903 [2] 365).
- $C_{31}H_{26}O_6N_4$  C 62,2 — H 4,3 — O 24,1 — N 9,4 — M. G. 598.  
 1)  $\beta$ -Keto- $\alpha\alpha\gamma\gamma$ -Tetra[4-Nitrobenzyl]propan. Sm. 194—195° (B. 37, 1996 C. 1904 [2] 27).
- $C_{31}H_{28}O_{14}Cl_4$  2) Pentaacetat d. Tetrachlorbarbaloïn. Sm. 166,4° (C. 1903 [1] 235; Bl. [3] 21, 674). — \*III, 453.
- $C_{31}H_{27}ON$  C 86,7 — H 6,3 — O 3,7 — N 3,3 — M. G. 429.  
 1) 4-Diäthylamidophenyldinaphtopyran. Sm. 230—231° (C. r. 138, 577 C. 1904 [1] 957).

- $C_{31}H_{27}O_6N_3$  C 69,3 — H 5,0 — O 17,9 — N 7,8 — M. G. 537.  
 1) Di[Phenylamidoformiat] d. Benzoylpinephthrin.  $H_2SO_4$  (B. 36, 1846 C. 1903 [2] 303). — \*III, 667.
- $C_{31}H_{27}NBr_2$  1) Verbindung (aus der Verb.  $C_{31}H_{27}N$ ). Sm. oberh.  $300^\circ$  (B. 36, 1501 C. 1903 [1] 1351).
- $C_{31}H_{28}O_3N_2$  C 78,1 — H 5,9 — O 10,1 — N 5,9 — M. G. 476.  
 1) Verbindung (aus Desoxybenzoin u. 5-Keto-3-Methyl-4-Benzyliden-1-Phenyl-4,5-Dihydropyrazol). Sm.  $195^\circ$  (B. 36, 2128 C. 1903 [2] 365).
- $C_{31}H_{30}O_2N_4$  C 75,9 — H 6,1 — O 6,5 — N 11,4 — M. G. 490.  
 1) 3-Nitro-4-Dimethylamidophenylidi[4-Methylamido-1-Naphtyl]-methan (B. 37, 1911 C. 1904 [2] 115).
- $C_{31}H_{30}O_4N_2$  2) Di[Benzoyl-4-Aethoxylphenylamido]methan. Sm.  $83-84^\circ$  (B. 37, 3117 C. 1904 [2] 1316).
- $C_{31}H_{30}O_5S_2$  2)  $\alpha$ -Keto- $\gamma$ -Dibenzylsulfon- $\alpha$ -Diphenylpentan (B. 37, 510 C. 1904 [1] 884).
- $C_{31}H_{30}N_3Cl$  1) Chlorid d.  $\alpha$ -Oxy- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha$ -Di[4-Methylamido-1-Naphtyl]methan (B. 37, 1913 C. 1904 [2] 116).
- $C_{31}H_{31}ON_3$  C 80,7 — H 6,7 — O 3,5 — N 9,1 — M. G. 461.  
 1) Hydroxylaminderivat d. Base  $C_{31}H_{32}O_2N_2$ . Sm.  $245^\circ$  (C. r. 137, 608 C. 1903 [2] 1180).
- $C_{31}H_{31}O_2N_3$  C 78,0 — H 6,5 — O 6,7 — N 8,8 — M. G. 477.  
 1) Verbindung (aus d. Verbind.  $C_{31}H_{32}O_2N_2$ ). Sm.  $203^\circ$  (C. r. 138, 212 C. 1904 [1] 663).
- $C_{31}H_{32}ON_2$  C 78,2 — H 6,7 — O 3,4 — N 11,7 — M. G. 476.  
 1) Acetylderivat d. Phenylimido- $\alpha$ -Phenylamidobenzylidencampher. Sm.  $166^\circ$  (Soc. 83, 106 C. 1903 [1] 233, 458).
- $C_{31}H_{32}O_2N_2$  C 80,2 — H 6,9 — O 6,9 — N 6,0 — M. G. 464.  
 1) 2-Dimethylamido-9,10-Dioxy-9-[4-Methylphenyl]-10-[4-Dimethylamidophenyl]-9,10-Dihydroanthracen. Sm.  $163-164^\circ$  (C. r. 137, 608 C. 1903 [2] 1180).
- $C_{31}H_{32}O_3N_2$  C 77,5 — H 6,7 — O 10,0 — N 5,8 — M. G. 480.  
 1) 9'-Methyläther d. 9,10-Dioxy-2-Dimethylamido-9-[4-Oxyphenyl]-10-[4-Dimethylamidophenyl]-9,10-Dihydroanthracen. Sm.  $176^\circ$  (C. r. 138, 212 C. 1904 [1] 663).
- $C_{31}H_{34}O_2N_4$  C 75,3 — H 6,9 — O 6,5 — N 11,3 — M. G. 494.  
 1) Di[4-Dimethylamidophenyl]-3,4-Di[Acetylamido]-1-Naphtylmethan. Sm.  $258-259^\circ$  (C. 1903 [1] 88; B. 37, 1910 C. 1904 [2] 115).
- $C_{31}H_{34}O_6N_2$  C 66,2 — H 6,0 — O 22,8 — N 5,0 — M. G. 562.  
 1) Tetraacetat d. 4',4''-Di[Dimethylamido]-3,4,2',2''-Tetraoxytriphenylmethan. Sm.  $165-167^\circ$  (B. 36, 2919 C. 1903 [2] 1065).
- $C_{31}H_{34}N_3Cl$  1)  $\alpha$ -[2-Chlor-4-Dimethylamidophenyl]- $\alpha$ -Di[2-Methyl-1-Aethyl-3-Indolyl]methan. Sm.  $219^\circ$  (B. 37, 323 C. 1904 [1] 668).
- $C_{31}H_{37}O_7N$  C 69,5 — H 6,9 — O 20,9 — N 2,6 — M. G. 535.  
 1) Aspidinanilid. Sm.  $132^\circ$  (A. 329, 330 C. 1904 [1] 800).
- $C_{31}H_{47}O_{10}N$  C 63,9 — H 6,3 — O 27,4 — N 2,4 — M. G. 583.  
 1) Diacetylcevin. Sm.  $190^\circ$  (B. 37, 1952 C. 1904 [2] 126).
- $C_{31}H_{51}O_4Cl$  1) Diäthylester d. Säure  $C_{27}H_{49}O_4Cl$ . Sm.  $142-143^\circ$  (B. 37, 3705 C. 1904 [2] 1699).

## — 31 IV —

- $C_{31}H_{43}O_3NBr_2$  1) 2-Acetat d. N-Palmitylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm.  $64-65^\circ$  (A. 332, 203 C. 1904 [2] 211).

**C<sub>32</sub>-Gruppe.**

- $C_{32}H_{24}$  5) 1,4-Di[Diphenylmethylen]-1,4-Dihydrobenzol. Sm.  $239-242^\circ$  (B. 37, 1469 C. 1904 [1] 1342).  
 6) 9,9,10-Triphenyl-9,10-Dihydroanthracen. Sm.  $220^\circ$  (C. r. 139, 11 C. 1904 [2] 530).
- $C_{32}H_{26}$  3) 1,4-Di[Diphenylmethyl]benzol. Sm.  $172^\circ$  (B. 37, 2006 C. 1904 [2] 225).

## — 32 II —

- $C_{82}H_{20}O_4$  C 82,0 — H 4,3 — O 13,7 — M. G. 468.  
 1) Dibenzozat d. 1,2-Dioxychrysen. Sm. 241—242° (D.R.P. 151981 *C.* 1904 [2] 167).
- $C_{92}H_{20}O_8$  \*1) Tribenzozat d. Purpurogallin. Sm. 212—213° (*Soe.* 83, 195 *C.* 1903 [1] 639).
- $C_{92}H_{24}O$  4) 10-Oxy-9,9,10-Triphenyl-9,10-Dihydroanthracen. Sm. 200°.  
 +  $(C_6H_5)_2O$  (*C. r.* 139, 10 *C.* 1904 [2] 530).
- $C_{92}H_{24}O_4$  5)  $\alpha$ -Dehydroisodypnopinakolin. Sm. 174,5° (*C.* 1904 [1] 1258).  
 4) Bisanhydrooxydiphenacyl. Sm. 279° (*B.* 36, 2422 *C.* 1903 [2] 502).  
 5) Isobisanhydrooxydiphenacyl. Sm. 279° (*B.* 36, 2424 *C.* 1903 [2] 502).
- $C_{82}H_{24}Cl_2$  1) 1,4-Di[ $\alpha$ -Chlordiphenylmethyl]benzol. Sm. 247° (*B.* 37, 2003 *C.* 1904 [2] 225).
- $C_{82}H_{24}Br_2$  1) 1,4-Di[ $\alpha$ -Bromdiphenylmethyl]benzol. Sm. 270—272° (*B.* 37, 1469 *C.* 1904 [1] 1342).
- $C_{82}H_{26}O$  \*4)  $\alpha$ -Isodypnopinakolin. Sm. 134,5° (*C.* 1903 [1] 880; 1904 [1] 1258).  
 \*9)  $\alpha$ -Homodypnopinakolin. Sm. 162° (*C.* 1903 [1] 880).
- $C_{82}H_{26}O_2$  3) 1,4-Di[ $\alpha$ -Oxydiphenylmethyl]benzol. Sm. 169° (*B.* 37, 2003 *C.* 1904 [2] 225).
- $C_{82}H_{26}O_4$  3) Dibenzozat d. o-Dioxyreten. Sm. 231—232° (D.R.P. 151981 *C.* 1904 [2] 167).
- $C_{82}H_{26}N_2$  4) 1,3-Di[Diphenylamidomethyl]benzol. Sm. 116° (*B.* 36, 1676 *C.* 1903 [2] 29).
- $C_{82}H_{30}O_{10}$  C 66,9 — H 5,2 — O 27,9 — M. G. 574.  
 1) Diacetat d. Tetraguajakhydrochinon. Sm. 155—160° (*C. r.* 137, 1272 *C.* 1904 [1] 445).
- $C_{82}H_{32}O_2$  C 85,7 — H 7,1 — O 7,1 — M. G. 448.  
 1) Acetat d. 5-Oxy-3-Phenyl-1,2-Di[4-Isopropylphenyl]benzol. Sm. 122° (*Am.* 31, 151 *C.* 1904 [1] 807).
- $C_{82}H_{32}O_{11}$  C 64,9 — H 5,4 — O 29,7 — M. G. 592.  
 1) Triacetat d. Verbindung  $C_{26}H_{26}O_8$ . Sm. 110° (*R.* 22, 142 *C.* 1903 [2] 124).
- $C_{92}H_{32}O_{12}$  2) Tetrarin. Sm. 204—205° u. Zers. (*C.* 1903 [1] 883; *C. r.* 136, 386 *C.* 1903 [1] 722).
- $C_{82}H_{32}N_6$  C 76,8 — H 6,4 — N 16,8 — M. G. 500.  
 1) 3,3'-Di[Benzylidenamido]-2,2'-Diphenyl-1,1'-Bitetrahydroimidazol. Sm. 138° (*J. pr.* [2] 67, 144 *C.* 1903 [1] 865).
- $C_{82}H_{34}O_8$  C 70,3 — H 6,2 — O 23,4 — M. G. 546.  
 1) Benzoat d. Verb.  $C_{26}H_{30}O_7$ . Sm. 140—142° (*A.* 329, 334 *C.* 1904 [1] 800).
- $C_{82}H_{36}O_6$  C 74,4 — H 7,0 — O 18,6 — M. G. 516.  
 2) Dibenzoylembeliasäure. Sm. 97—98° (*Ar.* 238, 21). — \*II, 1235.
- $C_{82}H_{40}O_8$  C 69,5 — H 7,2 — O 23,2 — M. G. 552.  
 1) Dilakton d. Acetylphotosantoninsäure. Sm. 199—201° (*G.* 33 [2] 68 *C.* 1903 [2] 1182).
- $C_{92}H_{42}O_2$  C 83,8 — H 9,2 — O 7,0 — M. G. 458.  
 1) Verbindung (aus Campher). Sm. 176° (*B.* 36, 2627 *C.* 1903 [2] 626).
- $C_{92}H_{42}O_6$  C 73,6 — H 8,0 — O 18,4 — M. G. 522.  
 1)  $\alpha\beta$ -Dibenzozat- $\gamma$ -Myristat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 65° (*B.* 36, 4343 *C.* 1904 [1] 434).
- $C_{92}H_{48}O_4$  C 77,4 — H 9,7 — O 12,9 — M. G. 496.  
 1)  $\alpha$ -Masticonsäure. Sm. 96—96,5° (*Ar.* 242, 108 *C.* 1904 [1] 1010).  
 2)  $\beta$ -Masticonsäure. Sm. 91—92° (*Ar.* 242, 109 *C.* 1904 [1] 1010).
- $C_{92}H_{52}O_2$  \*3) Acetat d.  $\beta$ -Amyrin. Sm. 239—240° (*J. pr.* [2] 68, 449 *C.* 1904 [1] 191).  
 5) Verbindung (aus *Asclepias syriaca* L.). Sm. 215—216° (*J. pr.* [2] 68, 455 *C.* 1904 [1] 191).
- $C_{82}H_{52}O_{10}$  C 64,4 — H 8,7 — O 26,8 — M. G. 596.  
 1) Digitophyllin. Sm. 230—232° u. Zers. (*Ar.* 235, 426). — \*III, 439.
- $C_{82}H_{54}O_8$  C 71,9 — H 10,1 — O 18,0 — M. G. 534.  
 1) 1-Dimenthylester d.  $\beta\zeta$ -Diketo- $\delta$ -Propylheptan- $\gamma\delta$ -Dicarbonsäure. Sm. 184° (*Soe.* 85, 53 *C.* 1904 [1] 360, 788).

- $C_{33}H_{40}O_{19}$  C 53,5 — H 5,4 — O 41,1 — M. (t. 740.  
 1) Robinin +  $\frac{1}{2}(7\frac{1}{2})H_2O$ . Sm. 195° (C. 1904 [1] 1609; Ar. 242, 220 C. 1904 [1] 1651).  
 $C_{33}H_{46}O_2$  \*1) Benzoat d. Lupeol. Sm. 265—266° (262°) (H. 41, 474 C. 1904 [1] 1652; B. 37, 3442 C. 1904 [2] 1307; B. 37, 4107 C. 1904 [2] 1655).  
 $C_{38}H_{48}O_2$  5) Benzoat d. Phytosterin. Sm. 145—145,5° (C. 1903 [2] 125).  
 6) Verbindung (aus Asclepias syriaca L.). Sm. 163—164° (J. pr. [2] 68, 408 C. 1904 [1] 105).  
 $C_{33}H_{50}N_2$  C 83,6 — H 10,5 — N 5,9 — M. (t. 474.  
 1) Phenylhydrazon d. Cholestenon. Sm. 142—152° (B. 37, 3100 C. 1904 [2] 1535).  
 $C_{33}H_{58}O_3$  2) trim. Aldehyd d. Dekan- $\alpha$ -Carbonsäure. Sm. 46—47°; Sd. 125°<sub>18</sub> (Bl. [3] 29, 1203 C. 1904 [1] 355).

- $C_{33}H_{19}O_4N_3$  C 76,0 — H 3,6 — O 12,3 — N 8,1 — M. (t. 521.  
 1) Dibenzoat d.  $\alpha$ -Diphenylenpyridindiketondioxim. Sm. 250° u. Zers. (G. 33 [2] 160 C. 1903 [2] 1273).  
 $C_{38}H_{10}O_5N_3$  C 73,7 — H 3,5 — O 14,9 — N 7,8 — M. (t. 537.  
 1) Dibenzoat d. Methenylbisindandiontrioximanhydrid. Sm. 280° u. Zers. (G. 33 [2] 159 C. 1903 [2] 1273).  
 $C_{38}H_{23}O_9N_7$  C 59,9 — H 3,5 — O 21,8 — N 14,8 — M. (t. 661.  
 1) 2,4,4'-Tri[4-Nitrobenzoylamido]diphenylamin +  $H_2O$ . Sm. 180 bis 190° (303—304° wasserfrei) (B. 37, 1071 C. 1904 [1] 1273).  
 $C_{38}H_{27}O_5N$  C 81,7 — H 5,5 — O 9,9 — N 2,9 — M. (t. 485.  
 1) Tri[2-Oxy-1-Naphtylmethyl]amin. Sm. 164°. HCl, Acetat (G. 34 [1] 214 C. 1904 [1] 1522).  
 $C_{38}H_{27}O_5N$  C 76,6 — H 5,2 — O 15,5 — N 2,7 — M. (t. 517.  
 1) Dibenzoat d. Acetylaponmorphin. Sm. 156—158° (B. 35, 4385 C. 1903 [1] 338).  
 $C_{39}H_{28}ON_2$  C 84,6 — H 6,0 — O 3,4 — N 6,0 — M. (t. 468.  
 1)  $\alpha$ -Benzoyl- $\alpha\beta$ -Di[Diphenylmethyl]hydrazin. Sm. 155° (J. pr. [2] 67, 189 C. 1903 [1] 875).  
 $C_{38}H_{29}O_5N$  C 76,3 — H 5,6 — O 15,4 — N 2,7 — M. (t. 519.  
 1) Methyläther d. Dibenzoylthebenin. Sm. 159° (B. 37, 2787 C. 1904 [2] 716).  
 $C_{38}H_{30}O_5N_4$  C 63,3 — H 4,8 — O 23,0 — N 8,9 — M. (t. 626.  
 1) Tetra[Phenylamidoformiat] d. l-Arabinose. Sm. 250—255° u. Zers. (C. r. 138, 634 C. 1904 [1] 1068).  
 2) Tetra[Phenylamidoformiat] d. l-Xylose. Sm. 265—270° (C. r. 138, 634 C. 1904 [1] 1068).  
 $C_{33}H_{31}O_7N$  C 71,6 — H 5,6 — O 20,2 — N 2,5 — M. (t. 553.  
 1) Dibenzoyllaurotetanin. Sm. 194° (Ar. 236, 619). — \*III, 661.  
 $C_{33}H_{32}N_3Cl$  \*1) Chlorid d.  $\alpha$ -Oxy- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]- $\alpha$ -[4-Phenylamido-1-Naphtyl]methan (Victoriablau B) (D.R.P. 27789, 29962; B. 37, 1913 C. 1904 [2] 115).  
 $C_{38}H_{34}O_3N_4$  C 76,5 — H 6,5 — O 6,2 — N 10,8 — M. (t. 518.  
 1) 3-Nitro-4-Dimethylamidophenyldi[4-Aethylamido-1-Naphtyl]-methan. Sm. 200° (C. 1903 [1] 88; B. 37, 1911 C. 1904 [2] 115).  
 $C_{38}H_{34}O_5S_2$  1)  $\gamma$ -Keto- $\alpha\alpha$ -Dibenzylsulfon- $\alpha\alpha$ -Diphenyl- $\beta\delta$ -Dimethylpentan. Sm. 209—210° (B. 37, 509 C. 1904 [1] 884).  
 $C_{38}H_{34}O_5N_3$  C 59,1 — H 5,1 — O 19,1 — N 16,7 — M. (t. 670.  
 1) Hydrazidianilid d. Hippurylasparagylasparaginsäure. Zers. bei 147° (J. pr. [2] 70, 191 C. 1904 [2] 1397).  
 $C_{33}H_{34}N_3Cl$  1) Chlorid d.  $\alpha$ -Oxy- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha\alpha$ -Di[4-Aethylamido-1-Naphtyl]methan (B. 37, 1914 C. 1904 [2] 116).  
 $C_{33}H_{35}O_{14}N$  C 59,2 — H 5,2 — O 33,5 — N 2,1 — M. (t. 669.  
 1) Tetraacetat d. 4-Nitrobenzylidendivanillindimethyläther. Sm. 186—188° (B. 36, 3976 C. 1904 [1] 373).  
 $C_{33}H_{49}O_2N$  C 80,7 — H 10,0 — O 6,5 — N 2,8 — M. (t. 491.  
 1) Phenylamidoformiat d. Cholesterin. Sm. 168—169° (Bl. [3] 31, 71 C. 1904 [1] 578).

- $C_{33}H_{49}O_2N_3$  C 76,3 — H 9,4 — O 6,2 — N 8,1 — M. G. 519.  
 1) 4-Nitrophenylhydrazon d. Cholestenon. Sm. 160—195° (B. 37, 3100 C. 1904 [2] 1535).  
 $C_{33}H_{49}O_3N_3$  C 74,0 — H 9,2 — O 9,0 — N 7,8 — M. G. 535.  
 1) 4-Nitrophenylhydrazon d. Cholestanonol. Sm. 195° (194°). +  $C_2H_6O$  (M. 24, 655 C. 1903 [2] 1236; B. 36, 3755 C. 1903 [2] 1417).

— 33 IV —

- $C_{33}H_{26}O_8N_4S_2$  \*1) Monobenzyläther d. Stilbendisulfonsäurediazophenol (B. 36, 2977 C. 1903 [2] 1031).

— 33 V —

- $C_{38}H_{27}ON_6S_3P$  1) Phosphoryltri[1-Naphtylthioharnstoff] (Soc. 85, 367 C. 1904 [1] 1407).

**C<sub>34</sub>-Gruppe.**

- $C_{34}H_{20}$  C 95,3 — H 4,7 — M. G. 428.  
 1) Dinaphtylendiphenylenäthen. Sm. 180—190° (A. 335, 136 C. 1904 [2] 1134).  
 $C_{34}H_{54}$  C 88,3 — H 11,7 — M. G. 462.  
 1) Kohlenwasserstoff (aus Guttapercha) (C. 1903 [1] 83).

— 34 II —

- $C_{34}H_{22}O_3$  C 73,1 — H 3,9 — O 22,9 — M. G. 558.  
 1) Tetrabenzoat d. 1,2,3,4-Tetraoxybenzol (B. 37, 120 C. 1904 [1] 586).  
 $C_{34}H_{27}N$  C 90,9 — H 6,0 — N 3,1 — M. G. 449.  
 1) Anilinderivat d. 9,10-Dibenzylidenanthracen. Sm. 233° (M. 25, 801 C. 1904 [2] 1137).  
 $C_{34}H_{28}O$  C 90,3 — H 6,2 — O 3,5 — M. G. 452.  
 1) Äthyläther d. 10-Oxy-9,9,10-Triphenyl-9,10-Dihydroanthracen. Sm. 250° (C. r. 139, 11 C. 1904 [2] 530).  
 $C_{34}H_{30}O_2$  2) Dimethyläther d. 1,4-Di[α-Oxydiphenylmethyl]benzol. Sm. 181 bis 182,5° (B. 37, 1468 C. 1904 [1] 1342).  
 $C_{34}H_{34}O_2$  C 86,1 — H 7,2 — O 6,7 — M. G. 474.  
 1) γ,δ-Diketo-α,ε,κ-Tetraphenyldekan. Sm. 171—172° (A. 330, 234 C. 1904 [1] 945).  
 $C_{34}H_{35}N_3$  2) Di[4-Dimethylamidophenyl]-4-[4-Methylphenylamido-1-Naphtylmethan. Sm. 193—194° (C. 1903 [1] 88; B. 37, 1406 C. 1904 [2] 115).  
 3) Verbindung (aus Dibenzylidenaceton). Sm. 158° u. Zers. (Soc. 85, 1180 C. 1904 [2] 1216).  
 $C_{34}H_{38}O_4$  2) Verbindung (aus α-Oxybenzylidenampher). Sm. 221° (Soc. 83, 102 C. 1903 [1] 234, 459).  
 $C_{34}H_{38}O_{19}$  C 54,4 — H 5,1 — O 40,5 — M. G. 750.  
 1) Cacaflavin + 4H<sub>2</sub>O. Sm. 163—164° (J. pr. [2] 66, 413 C. 1903 [1] 528).  
 $C_{34}H_{46}O_6$  C 76,4 — H 8,6 — O 15,0 — M. G. 534.  
 1) Verbindung (aus d. d-Santonigesäureäthylester) (G. 25 [2] 292). — \*II, 977.  
 $C_{34}H_{46}O_8$  2) αβ-Dibenzoat-γ-Palmitat d. αβγ-Trioxypropan. Sm. 69° (B. 36, 4343 C. 1904 [1] 434).  
 $C_{34}H_{48}O_8$  C 80,9 — H 9,5 — O 9,5 — M. G. 504.  
 1) Benzoat d. Cholestanonol. Sm. 173° (B. 36, 3755 C. 1903 [2] 1417).  
 $C_{34}H_{50}O_2$  2) Verbindung (aus Asclepias syriaca L.). Sm. 165° (J. pr. [2] 68, 413 C. 1904 [1] 105).  
 3) Verbindung (aus Asclepias syriaca L.). Sm. 180—182° (J. pr. [2] 68, 401 C. 1904 [1] 105).  
 $C_{34}H_{50}O_9$  C 67,8 — H 8,3 — O 23,9 — M. G. 602.  
 1) Diäthylester d. Photosantoninsäure. Sm. 132° (G. 33 [2] 68 C. 1903 [2] 1182).  
 $C_{34}H_{54}O_6$  C 75,3 — H 10,0 — O 14,7 — M. G. 542.  
 1) Acetat d. Cardol. Fl. (C. 1896 [1] 112). — \*III, 462.

- $C_{34}H_{56}O_3$  C 79,7 — H 10,9 — O 9,4 — M. G. 512.  
 1) Verbindung (aus *Asclepias syriaca* L.). Sm. 79—83° (*J. pr.* [2] 68, 458 *C.* 1904 [1] 191).
- $C_{34}H_{56}O_{21}$  \*1) Ericolin (*C.* 1903 [2] 729).  
 $C_{34}H_{56}O_{19}$  1) Herniarin. Sm. 228—231° (*C.* 1904 [1] 1215).  
 $C_{34}H_{56}O_4$  2) Dipalmitat d.  $\alpha\beta$ -Dioxyäthan. Sm. 72°; Sd. 241° (*B.* 36, 4340 *C.* 1904 [1] 433).
- 34 III —
- $C_{34}H_{19}O_4N_3$  C 76,5 — H 2,6 — O 12,0 — N 8,9 — M. G. 533.  
 1) 4-Phenylamidoindanthren (*B.* 36, 3438 *C.* 1903 [2] 1280).
- $C_{34}H_{20}O_4N_4$  3) 1,5-Di[2-Oxy-1-Naphtylazo]-9,10-Anthrachinon (*B.* 37, 4187 *C.* 1904 [2] 1742).  
 4) 1,5-Di[4-Oxy-1-Naphtylazo]-9,10-Anthrachinon (*B.* 37, 4187 *C.* 1904 [2] 1742).
- $C_{34}H_{25}O_4N_3$  C 75,7 — H 4,6 — O 11,9 — N 7,8 — M. G. 539.  
 1) Di[Diphenylamid] d. Benzoximidomalonsäure. Sm. 175° (*C.* 1904 [1] 1555).
- $C_{34}H_{26}O_3N_2$  C 80,0 — H 5,1 — O 9,4 — N 5,5 — M. G. 510.  
 1) s-Di[4-Methylphenyl]rhodamin (D. R. P. 47451). — \*III, 577.
- $C_{34}H_{26}O_4N_4$  5) 4,4'-Dimethyläther d. 4,4'-Di[4-Oxyphenyl]-3,3'-Dioxy-2,2'-Bina-  
 naphthyl (*C. r.* 138, 1619 *C.* 1904 [2] 338).
- $C_{34}H_{28}O_2N_6$  C 73,9 — H 5,1 — O 5,8 — N 15,2 — M. G. 552.  
 1) Verbindung (aus 3-Keto-4-Benzoyl-5-Methyl-2-Phenyl-2,3-Dihydro-  
 pyrazol). Sm. oberh. 300° (*B.* 36, 529 *C.* 1903 [1] 642).
- $C_{34}H_{34}O_4N_4$  5) 2-Nitrophenylimid d. s-Tetraäthylrhodamin. Sm. 194° (D. R. P. 88675). — \*III, 576.  
 6) 3-Nitrophenylimid d. s-Tetraäthylrhodamin. Sm. 145° (D. R. P. 88675). — \*III, 576.  
 7) 4-Nitrophenylimid d. s-Tetraäthylrhodamin. Sm. 200° (D. R. P. 88675). — \*III, 576.
- $C_{34}H_{34}N_3Cl$  \*1) Chlorid d.  $\alpha$ -Oxy- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]- $\alpha$ -[4-p-Methyl-  
 phenylamido-1-Naphtyl]methan (Victoriablau 4k) (*B.* 37, 1913 *C.* 1904 [2] 116).
- $C_{34}H_{35}O_2N_3$  C 78,9 — H 6,8 — O 6,2 — N 8,1 — M. G. 517.  
 1) Phenylimid d. s-Tetraäthylrhodamin. Sm. 220—222° (D. R. P. 80153, 81958). — \*III, 576.
- $C_{34}H_{38}ON_2$  C 83,6 — H 7,4 — O 3,3 — N 5,7 — M. G. 488.  
 1) 9,9-Di[4-Diäthylamidophenyl]-10-Keto-9,10-Dihydroanthracen. Sm. 218° (*C. r.* 136, 537 *C.* 1903 [1] 837).
- $C_{34}H_{38}O_2N_5$  1) Cusparein. Sm. 54° (*C.* 1903 [2] 1011).  
 $C_{34}H_{38}O_2N_4$  2) Dimethyläther d.  $\beta\eta$ -Di[Phenylhydrazon]- $\delta\delta$ -Di[4-Oxyphenyl]-  
 oktan. Sm. 180° (*A.* 330, 237 *C.* 1904 [1] 945).
- $C_{34}H_{38}O_4N_4$  C 72,1 — H 6,7 — O 11,3 — N 9,9 — M. G. 566.  
 1) Mesoporphyrin. Sm. noch nicht bei 310°. Zn, Cu, 2HCl (*H.* 37, 54 *C.* 1903 [1] 44; *B.* 35, 4342 *C.* 1903 [1] 294).  
 C 68,2 — H 6,3 — O 16,1 — N 9,4 — M. G. 598.  
 1) Hämatoporphyrin. 2HCl (*H.* 37, 59 *C.* 1903 [1] 45).
- $C_{34}H_{39}O_7P$  1) Phosphit d.  $\alpha\beta\gamma$ -Trioxypropan- $\alpha\gamma$ -Di[2-Methylphenyläther]. Sm. 118—119° (*Soc.* 83, 1139 *C.* 1903 [2] 1059).  
 2) Phosphit d.  $\alpha\beta\gamma$ -Trioxypropan- $\alpha\gamma$ -Di[4-Methylphenyläther]. Sm. 81—82° (*Soc.* 83, 1140 *C.* 1903 [2] 1059).
- $C_{34}H_{42}N_4S$  2) Sulfid d.  $\alpha$ -Merkaptodi[3-Methylamido-4-Methylphenyl]methan<sup>p</sup>  
 Sm. 214—215° (*C.* 1903 [1] 400).
- $C_{34}H_{47}O_{11}N$  \*1) Akonitin. HBr + 2½ H<sub>2</sub>O (*C.* 1904 [2] 1238).  
 $C_{34}H_{51}O_{10}N$  C 64,4 — H 8,1 — O 25,3 — N 2,2 — M. G. 633.  
 1) Acetylceevin. Sm. 234°. HCl (*B.* 37, 1950 *C.* 1904 [2] 126).  
 $C_{34}H_{71}O_9N_{17}$  C 47,4 — H 8,2 — O 16,7 — N 27,6 — M. G. 861.  
 1) Sturin. 2(HCl, PtCl<sub>4</sub>) (*H.* 37, 104 *C.* 1903 [1] 236).

## — 34 IV —

- $C_{34}H_{28}O_{12}N_8S_4$  1) Disazoverbindung (aus 4,4'-Diamido-3,3'-Dimethylbiphenyl-6,6'-Di-  
 sulfonsäure u. 1-Amidonaphtalin-4-Sulfonsäure). Ba<sub>2</sub> (*J. pr.* [2] 66, 568 *C.* 1903 [1] 519).

- $C_{34}H_{30}O_{16}N_4S_4$  1) 1, 5-Di[2-Oxy-1-Naphtylazo]-9, 10-Anthrachinon-1<sup>s</sup>, 1<sup>s</sup>, 5<sup>s</sup>, 5<sup>s</sup>-Tetrasulfonsäure (*B.* 37, 4187 *C.* 1904 [2] 1742).  
 $C_{34}H_{32}O_4N_4Fe$  2) Dehydrohämatin (*H.* 40, 413 *C.* 1904 [1] 679).  
 $C_{34}H_{34}O_5N_4Fe$  3) Dehydrochloridhämin. HCl, HBr (*H.* 40, 410 *C.* 1904 [1] 679).  
 $C_{34}H_{47}O_2N_4P$  1) Hämatin (*H.* 40, 415 *C.* 1904 [1] 679).  
 1) Verbindung (aus 4-Amido-1,3-Dimethylbenzol). Sm. 98° (*C. r.* 139, 411 *C.* 1904 [2] 764).

## — 34 V —

- $C_{34}H_{33}O_4N_4ClFe$  \*1) Hämin (*H.* 40, 393 *C.* 1904 [1] 678; *H.* 41, 543 *C.* 1904 [2] 452; *H.* 42, 65 *C.* 1904 [2] 598).  
 $C_{34}H_{33}O_4N_4BrFe$  1) Bromwasserstoffhämin (*H.* 40, 399 *C.* 1904 [1] 679).

**C<sub>35</sub>-Gruppe.**

$C_{35}H_{68}$  C 86,1 — H 13,9 — M. G. 488.

- 1) Kohlenwasserstoff (aus Petroleum) *C.* 1904 [1] 409).

## — 35 II —

- $C_{35}H_{28}O_{11}$  3) Dibenzoat d. Barbaloin (*C.* 1903 [1] 235). — \*III, 453.  
 $C_{35}H_{38}O_{12}$  \*1) Filixsäure (oder  $C_{35}H_{40}O_{12}$ ) (*Ar.* 242, 496 *C.* 1904 [2] 1418).  
 $C_{35}H_{40}O_{10}$  C 67,1 — H 7,4 — O 25,5 — M. G. 626.  
 1)  $\alpha$ -Ardisiol. Sm. 107° (*C.* 1903 [1] 837).  
 2)  $\beta$ -Ardisiol. Sm. 183° (*C.* 1903 [1] 837).  
 $C_{35}H_{40}O_{11}$  C 65,4 — H 7,2 — O 27,4 — M. G. 642.  
 1) Oxyardisiol. Sm. 191° (*C.* 1903 [1] 837).  
 $C_{35}H_{50}O_2$  C 83,6 — H 10,0 — O 6,4 — M. G. 502.  
 1) Benzoat d. Verbindung  $C_{28}H_{46}O$ . Sm. 195—196° (*J. pr.* [2] 68, 457 *C.* 1904 [1] 191).  
 $C_{35}H_{52}O_2$  3) Benzoat d. Anthesterin (oder  $C_{36}H_{54}O_2$ ). Sm. 284—286° (*Bl.* [3] 27, 1231 *C.* 1903 [1] 237).  
 4) Verbindung (aus *Asclepias syriaca* L.). Sm. 95° (*J. pr.* [2] 68, 412 *C.* 1904 [1] 105).  
 $C_{35}H_{52}O_6$  2) 1-Dimenthylester d.  $\beta\zeta$ -Diketo- $\delta$ -Phenylheptan- $\gamma\delta$ -Dicarbonsäure. Sm. 203—206° (*Soc.* 85, 55 *C.* 1904 [1] 360, 788).  
 $C_{35}H_{56}O_4$  2)  $\alpha$ -Masticoresen. Sm. 74—75° (*Ar.* 242, 110 *C.* 1904 [1] 1010).  
 $C_{35}H_{58}O_5^*$  2)  $\alpha\beta$ -Dipalmitat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 67° (*C.* 1903 [1] 133).  
 3)  $\alpha\gamma$ -Dipalmitat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 69° (*C.* 1903 [1] 133).

## — 35 III —

- $C_{35}H_{28}O_3N_3$  \*1) Imabenzil. Sm. 195° (*B.* 35, 4138 *C.* 1903 [1] 295).  
 $C_{35}H_{28}O_4N_4$  2)  $\beta\beta$ -Di[ $\beta$ -(2-Oxy-1-Naphtyl)azo-4-Oxyphenyl]propan (*C.* 1904 [2] 1737).  
 $C_{35}H_{29}O_3N_3$  2)  $\alpha\gamma\delta$ -Tri[2-Pyridoyl]- $\beta\delta$ -[Diphenyl]pentan. Sm. 215° (*B.* 35, 4062 *C.* 1903 [1] 91).  
 $C_{35}H_{30}O_{10}N_2$  C 65,8 — H 4,7 — O 25,1 — N 4,4 — M. G. 638.  
 1) Tetrabenzoat d. Glykoseureid. Sm. 117° (*R.* 22, 62 *C.* 1903 [1] 1080).  
 $C_{35}H_{31}O_{11}N$  C 65,5 — H 4,8 — O 27,5 — N 2,2 — M. G. 641.  
 1) Tetrabenzoylederivat d. Amidoglykoheptonsäure. Sm. 101° (*B.* 35, 4020 *C.* 1903 [1] 391).  
 $C_{35}H_{32}N_4S_2$  1) 4,4'-Di[ $\alpha$ -Methyl- $\beta$ -Phenylthioureido]triphenylmethan. Sm. 124° (*B.* 37, 641 *C.* 1904 [1] 951).  
 $C_{35}H_{51}O_4N_3$  C 72,8 — H 8,8 — O 11,1 — N 7,3 — M. G. 577.  
 1) 4-Nitrophenylhydrazon d. Cholestanonolacetat. Sm. 144° (*M.* 24, 654 *C.* 1903 [2] 1235).

## — 35 IV —

- $C_{35}H_{32}ON_4S_2$  1)  $\alpha$ -Oxy-4,4'-Di[ $\alpha$ -Methyl- $\beta$ -Phenylthioureido]triphenylmethan. Sm. 136° (*B.* 37, 644 *C.* 1904 [1] 951).

- $C_{86}H_{84}O_8N_2S_2$  1) Di[2-Naphtalinsulfotyrosyl-dl-Leucin. Sm. 100—105° (*B.* 36, 2606 *C.* 1903 [2] 619).
- $C_{85}H_{51}O_{25}N_6P_4$  1) Heminukleinsäure + 3H<sub>2</sub>O (*C.* 1904 [2] 133).
- $C_{85}H_{56}O_{19}N_8S$  1) Uroferrinsäure. Ba, Zn (*H.* 37, 282 *C.* 1903 [1] 727).

## — 35 V —

- $C_{85}H_{24}O_7N_6Cl_5P_2$  1) Verbindung (aus Anthranilsäure u. Phosphorpentachlorid). Sm. 148—153° (*B.* 36, 1827 *C.* 1903 [2] 201).

**C<sub>86</sub>-Gruppe.**

- $C_{86}H_{18}$  C 96,0 — H 4,0 — M. G. 450.
- 1) Trinaphtylenbenzol (Dekakylon). Sm. 387°. Pikrat (*B.* 36, 968 *C.* 1903 [1] 1088; *B.* 36, 1586 *C.* 1903 [2] 46).

## — 36 II —

- $C_{86}H_9Cl_9$  1) Nonochlordekacyklen. Sm. 215—218° u. Zers. (*B.* 36, 3773 *C.* 1903 [2] 1446).
- $C_{86}H_{16}Br_9$  1) Tribromdekacyklen. Sm. 397—400° (*B.* 36, 3773 *C.* 1903 [2] 1446).
- $C_{86}H_{22}O_8$  4) Tribenzoat d. 5,6-Dioxy-2-Keto-1-[3-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 173° (*B.* 29, 2434). — \*III, 533.
- $C_{86}H_{22}O_9$  3) Stictaurin (*C.* 1903 [2] 121).
- $C_{86}H_{24}O_8$  C 74,0 — H 4,1 — O 21,9 — M. G. 584.
- 1) Tribenzoat d. Butin. Sm. 155—157° (*C.* 1903 [1] 1415; 1904 [2] 451).
- $C_{86}H_{30}O_2$  C 87,4 — H 6,1 — O 6,5 — M. G. 494.
- 1) Verbindung (aus Benzylidenacetophenon). Sm. 180° (*Am.* 29, 360 *C.* 1903 [1] 1180).
- $C_{86}H_{34}N_4$  C 82,8 — H 6,5 — N 10,7 — M. G. 522.
- 1) Phenylhydrazinderivat d. Base  $C_{86}H_{30}O_2N_2$ . Sm. 200° (*C. r.* 137, 608 *C.* 1903 [2] 1180).
- $C_{86}H_{44}N_6$  C 77,2 — H 7,8 — N 15,0 — M. G. 560.
- 1) 2,3,5,6-Tetra[4-Dimethylamidophenyl]-2,3,5,6-Tetrahydro-1,4-Diazin. Sm. 95° (*B.* 37, 1738 *C.* 1904 [1] 1599).
- $C_{86}H_{56}O_4$  C 78,2 — H 10,1 — O 11,6 — M. G. 276.
- 1) Resen (aus Gräberharz). Sm. 74,5—76° (*Ar.* 242, 114 *C.* 1904 [1] 1010).
- 2) isom. Resen (aus Gräberharz). Sm. 130—131° (*Ar.* 242, 114 *C.* 1904 [1] 1010).
- $C_{86}H_{60}O_8$  3) Verbindung (aus Guttapercha) oder  $C_{86}H_{60}O_8$ . Sm. 145° (*C.* 1903 [1] 83).
- $C_{86}H_{60}O_{10}$  \*1) Dilchesterinsäure + 3H<sub>2</sub>O (*J. pr.* [2] 68, 34 *C.* 1903 [2] 512).
- $C_{86}H_{64}O_2$  C 81,8 — H 12,1 — O 6,1 — M. G. 528.
- 1) Chaulmoogrylester d. Chaulmoograsäure. Sm. 42° (*Soc.* 85, 857 *C.* 1904 [2] 348, 604).
- $C_{86}H_{68}O_4$  C 76,6 — H 12,1 — O 11,3 — M. G. 564.
- 1) Laktid d.  $\alpha$ -Oxyheptadekan- $\alpha$ -Carbonsäure. Sm. 88,5—90,5° (*Soc.* 85, 835 *C.* 1904 [2] 510).

## — 36 III —

- $C_{86}H_{16}O_8N_8$  C 73,8 — H 2,6 — O 16,4 — N 7,2 — M. G. 585.
- 1) Trinitrodekacyklen (*B.* 36, 3772 *C.* 1903 [2] 1446).
- $C_{86}H_{22}O_8S$  1) Anhydro-3,5-Dimerkapto-4-Thiocarbonyl-1-Keto-2,6-Diphenyl-1,4-Dihydrobenzol. Sm. 278° (*B.* 37, 1608 *C.* 1904 [1] 1444).
- $C_{86}H_{26}O_2N_8$  C 71,7 — H 4,3 — O 5,3 — N 18,6 — M. G. 602.
- 1) Azoderivat d. 3,6-Di[4-Amidobenzyl]-1,2,4,5-Tetrazin. Zers. bei 200° (*B.* 35, 3939 *C.* 1903 [1] 39).
- $C_{86}H_{26}O_8N_4$  C 70,8 — H 4,3 — O 15,7 — N 9,2 — M. G. 610.
- 1) Tetrabenzoylderivat d. 3,6-Dimethyl-1,2-Dihydro-1,3-Diazin-4,5-Dicarbonsäurecyklohydrazid. Sm. 189—191° (*B.* 37, 95 *C.* 1904 [1] 589).
- $C_{86}H_{30}O_3N_2$  C 80,3 — H 5,6 — O 8,9 — N 5,2 — M. G. 538.
- 1) s-Diäthylidiphenylrhodamin (D.R.P. 46354). — \*III, 577.

- $C_{96}H_{90}O_8N_4$  C 66,9 — H 4,6 — O 19,8 — N 8,7 — M. G. 646.  
 1) Diäthylester d. 4,4'-Biphenylendi[Azobenzoylbrenztraubensäure] (B. 37, 2209 C. 1904 [2] 324).  
 $C_{96}H_{98}O_6N_4$  C 69,7 — H 5,8 — O 15,5 — N 9,0 — M. G. 620.  
 1) Di[Phenylhydrazon] d. Isobiliansäure. Sm. 262° (M. 24, 55 C. 1903 [1] 765).  
 $C_{96}H_{42}O_4N_4$  C 72,7 — H 7,1 — O 10,8 — N 9,4 — M. G. 594.  
 1) Dimethylester d. Mesoporphyrin. Sm. 213—214° (H. 37, 63 C. 1903 [1] 45).  
 $C_{96}H_{48}O_{34}N_{17}$  C 24,8 — H 2,5 — O 58,9 — N 13,7 — M. G. 1737.  
 1) Nitrostärke (C. 1903 [1] 1122).  
 $C_{96}H_{44}N_6Br_2$  1) 1,4 - Dibrom - 2,3,5,6 - Tetra[4 - Dimethylamidophenyl]hexahydro-1,4-Diazin. Sm. 95° (B. 37, 1739 C. 1904 [1] 1599).

## — 36 IV —

- $C_{96}H_{28}N_4J_2S$  1) polym. 4-Phenylazodiphenyljodoniumsulfid (B. 37, 1315 C. 1904 [1] 1341).  
 $C_{96}H_{48}O_7N_2J$  1) Methylhydroxyd d. Pseudomorphinjodmethylat (B. 13, 93). — III, 911.  
 $C_{96}H_{61}O_2N_4P$  1) Verbindung (aus 4-Amido-1,3-Dimethylbenzol). Sm. 107° (C. r. 139, 411 C. 1904 [2] 764).

**C<sub>37</sub>-Gruppe.**

- $C_{37}H_{29}N_3$  2) 4-Phenylimido-1-Di[4-Phenylamidophenyl]methylen-1,4-Dihydrobenzol (4,4'-Diphenylamidofuchsonphenylimin). Sm. 237—238°. HCl, Pikrat (B. 37, 2870 C. 1904 [2] 777).  
 $C_{37}H_{31}N_3$  C 85,9 — H 6,0 — N 8,1 — M. G. 517.  
 1) 4,4',4''-Tri[Phenylamidophenyl]methan. Sm. 182—184° (B. 37, 2873 C. 1904 [2] 777).  
 $C_{37}H_{36}N_4$  C 82,9 — H 6,7 — N 10,4 — M. G. 536.  
 1) Phenylhydrazonderivat d. Base  $C_{31}H_{22}O_2N_2$ . Sm. 220° (C. r. 137, 608 C. 1903 [2] 1180).  
 $C_{37}H_{37}N_3$  C 84,9 — H 7,1 — N 8,0 — M. G. 523.  
 1) Tri[4-Aethylamido-1-Naphtyl]methan. Sm. oberh. 300° (C. 1903 [1] 88; B. 37, 1912 C. 1904 [2] 115).  
 $C_{37}H_{64}O_2$  \*1) Benzoat d.  $\alpha$ -Amyrin. Sm. 191—192° (Ar. 241, 154 C. 1903 [1] 1029).  
 \*2) Benzoat d.  $\beta$ -Amyrin. Sm. 229° (Ar. 241, 155 C. 1903 [1] 1029; J. pr. [2] 68, 452 C. 1904 [1] 191).  
 $C_{37}H_{50}O_4$  2) Carelemisäure. Sm. 120° (Ar. 241, 152 C. 1903 [1] 1029; Ar. 242, 119 C. 1904 [1] 1011).  
 3)  $\alpha$ -Isocolelemisäure. Sm. 120—122° (Ar. 242, 340 C. 1904 [2] 526).  
 4)  $\beta$ -Isocolelemisäure. Sm. 120° (Ar. 242, 350 C. 1904 [2] 526).  
 5) Tacelemisäure. Sm. 215° (Ar. 242, 357 C. 1904 [2] 527).  
 6)  $\alpha$ -Isotacelemisäure. Sm. 120—121° (Ar. 242, 355 C. 1904 [2] 527).  
 7)  $\beta$ -Isotacelemisäure. Sm. 120° (Ar. 242, 358 C. 1904 [2] 527).  
 $C_{37}H_{30}O_{10}$  C 66,9 — H 9,0 — O 24,1 — M. G. 664.  
 1) Gratioligenin. Sm. 285° (Ar. 240, 564 C. 1903 [1] 42).

## — 37 III —

- $C_{37}H_{31}ON_3$  C 83,3 — H 5,8 — O 3,0 — N 7,9 — M. G. 533.  
 1)  $\alpha$ -Oxy-4,4',4''-Tri[Phenylamido]triphenylmethan. Sm. 85° (B. 37, 2873 C. 1904 [2] 777).  
 $C_{37}H_{22}N_3Cl$  1) Chlorid d.  $\alpha$ -Oxy- $\alpha\alpha\alpha$ -Tri[4-Aethylamido-1-Naphtyl]methan (B. 37, 1914 C. 1904 [2] 116).  
 $C_{37}H_{34}O_4N_2$  C 77,9 — H 6,0 — O 11,2 — N 4,9 — M. G. 570.  
 1) Dibenzoat d. 4',4''-Di[Dimethylamido]-3,4-Dioxytriphenylmethan. Sm. 154° (B. 36, 2918 C. 1903 [2] 1065).  
 $C_{37}H_{35}O_6N_5$  C 68,8 — H 5,4 — O 14,9 — N 10,8 — M. G. 645.  
 1) Di[Phenylhydrazon] d. 3-Nitrobenzylidendivanillindimethyläther. Sm. 203,5—204,5° (B. 36, 3978 C. 1904 [1] 373).

- $C_{37}H_{36}ON_4$  C 80,5 — H 6,5 — O 2,9 — N 10,1 — M. G. 552.  
 1) Verbindung (aus d. Verb.  $C_{81}H_{34}O_3N_2$ ). Sm. 203° (*C. r.* 138, 212 *C. 1904* [1] 663).
- $C_{37}H_{42}O_5N_4$  C 71,4 — H 6,7 — O 12,9 — N 9,0 — M. G. 622.  
 1) Verbindung (aus Aspidin u. Phenylhydrazin). Sm. 208—209° (*A.* 329, 331 *C. 1904* [1] 800).  
 2) Verbindung (aus Pseudoaspidin). Sm. 201—202° (*A.* 329, 335 *C. 1904* [1] 800).
- $C_{37}H_{64}O_3N_2$  C 76,0 — H 11,0 — O 8,2 — N 4,8 — M. G. 584.  
 1) Spilanthol (*Ar.* 241, 280 *C. 1903* [2] 451).
- $C_{37}H_{67}O_2N$  C 79,7 — H 12,0 — O 5,7 — N 2,5 — M. G. 557.  
 1) Phenylamidoformiat d.  $\alpha$ -Oxytriakontan. Sm. 91,5 (*Bl.* [3] 31, 53 *C. 1904* [1] 507).

C<sub>38</sub>-Gruppe.

- $C_{38}H_{30}$  \*1) Hexaphenyläthan. Sm. 226—227° (*B.* 35, 3918 *C. 1903* [1] 84; *B.* 36, 379 *C. 1903* [1] 716; *C. r.* 137, 59 *C. 1903* [2] 574; *B.* 37, 2397 *C. 1904* [2] 443).  
 2) bim. Triphenylmethyl. Sm. 145—147°. +  $C_6H_6$ , + 2 Molec. Aether, + Essigsäureäthylester (*B.* 33, 3150; 34, 2726; *B.* 34, 3815 *C. 1902* [1] 44; *B.* 35, 1822 *C. 1902* [2] 210; *B.* 36, 320 *C. 1903* [1] 638; *B.* 36, 579 *C. 1903* [1] 638; *B.* 36, 376 *C. 1903* [1] 715; *B.* 37, 2033 *C. 1904* [2] 225; *B.* 37, 2397 *C. 1904* [2] 443). — \*II, 128.

## — 38 II —

- $C_{38}H_{24}S$  1) Dibenzylidinaphtylenthiofen. Sm. 207—210° (*Bl.* [3] 31, 928 *C. 1904* [2] 779).
- $C_{38}H_{26}O_4$  C 83,5 — H 4,8 — O 11,7 — M. G. 546.  
 1) Verbindung (aus Resorcin u. Benzil). Sm. 229° (*B.* 36, 3051 *C. 1903* [2] 1009).  
 2) Verbindung (aus d. Verb.  $C_{40}H_{28}O_5$ ) (*B.* 36, 3053 *C. 1903* [2] 1009).
- $C_{38}H_{28}O_3$  C 85,7 — H 5,2 — O 9,0 — M. G. 532.  
 1) Verbindung (aus d. Verb.  $C_{40}H_{28}O_5$ ). Sm. 278° (*B.* 36, 3053 *C. 1903* [2] 1009).
- $C_{38}H_{28}O_4$  C 83,2 — H 5,1 — O 11,7 — M. G. 548.  
 1) Verbindung (aus d. Verb.  $C_{40}H_{30}O_6$ ) (*B.* 36, 3052 *C. 1903* [2] 1009).
- $C_{38}H_{30}O_2$  \*1) Triphenylmethylperoxyd (*B.* 37, 3538 *C. 1904* [2] 1737).  
 $C_{38}H_{30}O_8$  C 74,3 — H 4,9 — O 20,8 — M. G. 614.  
 1) Tetrabenzoat d. 2,3,5,6-Tetraoxy-1,4-Diäthylbenzol. Sm. 275° (*B.* 37, 2387 *C. 1904* [2] 308).
- $C_{38}H_{30}N_2$  C 88,7 — H 5,8 — N 5,4 — M. G. 514.  
 1) Anhydro- $\alpha$ -Oxy-2-Amidotriphenylmethan. Sm. 250° u. Zers. (*B.* 37, 3196 *C. 1904* [2] 1472).  
 2) Anhydro- $\alpha$ -Oxy-4-Amidotriphenylmethan. Sm. 300° u. Zers. Pikrat (*B.* 37, 603 *C. 1904* [1] 886).
- $C_{38}H_{32}O_3$  \*1)  $\alpha\gamma\delta$ -Tribenzoyl- $\beta\delta$ -Diphenylpentan.  $\beta$ -Modif. Sm. 255—256°. +  $C_6H_6$ , +  $C_6H_6$  (*Soc.* 83, 366 *C. 1903* [1] 578, 1129).  
 $C_{38}H_{32}O_4$  C 82,6 — H 5,8 — O 11,6 — M. G. 552.  
 1) Verbindung (aus d. Verb.  $C_{88}H_{28}O_4$ ) (*B.* 36, 3052 *C. 1903* [2] 1009).
- $C_{38}H_{34}O_2$  C 87,4 — H 6,5 — O 6,1 — M. G. 522.  
 1)  $\alpha\delta$ -Diketo- $\alpha\beta\delta\epsilon$ -Tetraphenyl- $\gamma$ -[4-Isopropylphenyl]pentan. Sm. 225° (*B.* 35, 3969 *C. 1903* [1] 31).  
 $C_{38}H_{36}N_5$  C 80,7 — H 6,9 — N 12,4 — M. G. 565.  
 1) Phenylhydrazinderivat d. Phtalgrün. Sm. 288° (*C. 1903* [1] 86; *C. r.* 137, 609 *C. 1903* [2] 1181).  
 $C_{38}H_{40}O_{17}$  2) Heptaacetat d. Onospin. Sm. 76—80° (*M.* 24, 144 *C. 1903* [1] 1033).  
 $C_{38}H_{56}O_4$  C 79,1 — H 9,7 — O 11,1 — M. G. 576.  
 1) Carielemensäure. Sm. 215° (*Ar.* 242, 118 *C. 1904* [1] 1011).  
 2) Isocarielemensäure. Sm. 75—76° (*Ar.* 242, 118 *C. 1904* [1] 1011).  
 $C_{38}H_{74}O_4$  \*3) Distearat d.  $\alpha\beta$ -Dioxyäthan. Sm. 79°; Sd. 241° (*B.* 36, 4340 *C. 1904* [1] 433).

## — 38 III —

- $C_{38}H_{24}ON_2$  C 87,0 — H 4,6 — O 3,1 — N 5,3 — M. G. 524.  
 1) Aether d. 5-[3-Oxyphenyl]akridin. Sm. 366—367° u. Zers. (2HCl,  $PtCl_4$ ), (2HCl, 2AuCl<sub>3</sub>), 2(H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>), Pikrat (*B.* [3] 31, 1086 *C.* 1904 [2] 1509).
- $C_{38}H_{24}O_2Cl_6$  1) Peroxyd d.  $\alpha$ -Oxy-4,4',4''-Trichlortriphenylmethan. Sm. 140—142° (*B.* 37, 1636 *C.* 1904 [1] 1649).
- $C_{38}H_{24}O_{14}N_6$  \*1) Peroxyd d.  $\alpha$ -Oxytri[4-Nitrophenyl]methan. Sm. 218° (*B.* 37, 1640 *C.* 1904 [1] 1649).
- $C_{38}H_{28}O_2Cl_2$  1) Peroxyd d.  $\alpha$ -Oxy-4-Chlortriphenylmethan. Sm. 165° (*B.* 37, 1634 *C.* 1904 [1] 1649).
- $C_{38}H_{28}O_2Br_2$  1) Peroxyd d.  $\alpha$ -Oxy-4-Bromtriphenylmethan. Sm. 167° (*B.* 37, 1634 *C.* 1904 [1] 1649).
- $C_{38}H_{28}O_2J_2$  1) Peroxyd d.  $\alpha$ -Oxy-4-Jodtriphenylmethan. Sm. 169° (*B.* 37, 1634 *C.* 1904 [1] 1649).
- $C_{38}H_{29}O_5N$  C 78,7 — H 5,0 — O 13,8 — N 2,4 — M. G. 579.  
 1) Dibenzoat d. Benzoylapomorphin. Sm. 217—218° (*B.* 35, 4385 *C.* 1903 [1] 338).
- $C_{38}H_{30}O_3N_4$  C 79,4 — H 5,2 — O 5,6 — N 9,8 — M. G. 574.  
 1) Dibenzyläther d. 4,4'-Di[4-Oxyphenylazo]biphenyl (*B.* 36, 2975 *C.* 1903 [2] 1031).
- $C_{38}H_{31}ON$  C 88,2 — H 6,0 — O 3,1 — N 2,7 — M. G. 517.  
 1) Di[Triphenylmethyl]hydroxylamin. Sm. 184° (*B.* 37, 3151 *C.* 1904 [2] 1047).
- $C_{38}H_{32}O_6N_2$  C 74,5 — H 5,3 — O 15,7 — N 4,5 — M. G. 612.  
 1) Tetrabenzoat d. Skatosin. Sm. 169° (*C.* 1903 [1] 411).
- $C_{38}H_{35}ON_4$  C 80,6 — H 6,7 — O 2,8 — N 9,9 — M. G. 566.  
 1) Verbindung (aus d. Verb.  $C_{32}H_{34}O_3N_2$ ). Sm. 186° (*C.* r. 138, 213 *C.* 1904 [1] 663).
- $C_{38}H_{42}N_2Br_2$  1) 10,10'-Bi[5-Brom-1,3,4,6,7,9-Hexamethyl-5,10-Dihydroakridin] (*Soc.* 85, 1203 *C.* 1904 [2] 1060).
- $C_{38}H_{42}N_2Br_6$  1) 10,10'-Bi[1,3,4,6,7,9-Hexamethylakridin]hexabromid. Sm. 287° (*Soc.* 81, 285; *Soc.* 85, 1202 *C.* 1904 [2] 1060).
- $C_{38}H_{42}N_2J_6$  1) 10,10'-Bi[1,3,4,6,7,9-Hexamethylakridin]hexajodid. Sm. 275° (*Soc.* 85, 1203 *C.* 1904 [2] 1060).
- $C_{38}H_{46}O_4N_4$  C 73,3 — H 7,4 — O 10,3 — N 9,0 — M. G. 622.  
 1) Diäthylester d. Mesoporphyrin. Sm. 202—203°. Cu (*H.* 37, 63 *C.* 1903 [1] 45).
- $C_{38}H_{74}N_2Br_2$  1) Di[Bromisoamylat] d. 1,3-Di[Diisoamylamidomethyl]benzol. + Br<sub>4</sub> (*B.* 36, 1678 *C.* 1903 [2] 29).
- $C_{38}H_{76}O_2N_2$  C 77,0 — H 12,8 — O 5,4 — N 4,7 — M. G. 592.  
 1) Di[Isoamyl oxydhydrat] d. 1,3-Di[Diisoamylamidomethyl]benzol. Bromid + Br<sub>4</sub>, 2 Pikrat (*B.* 36, 1678 *C.* 1903 [2] 29).
- $C_{38}H_{78}O_{11}N_4$  C 59,5 — H 10,2 — O 23,0 — N 7,3 — M. G. 766.  
 1) Verbindung (aus Ketipinsäurediäthylester u. Benzyliden- $\beta$ -Naphtylamin). Sm. 80° (*B.* [3] 23, 437). — \*III, 23.

## — 38 IV —

- $C_{38}H_{34}N_6S_3Si$  1) Verbindung (aus Phenylsenfö u. Silicotetraphenylamid) (*Soc.* 83, 255 *C.* 1903 [1] 875).

**C<sub>39</sub>-Gruppe.**

- $C_{39}H_{28}O$  C 91,4 — H 5,4 — O 3,1 — M. G. 512.  
 1) Tetraphenyldiphenylenpropylenoxyd. Sm. 202—203° (*B.* 29, 736). — \*II, 994.
- $C_{39}H_{28}O_3$  C 86,0 — H 5,1 — O 8,8 — M. G. 544.  
 1) Tetraphenyldiphenylentrioxymethylen. Sm. 205—206° (*B.* 29, 736). — \*II, 993.

- $C_{39}H_{30}O$  C 91,0 — H 5,8 — O 3,1 — M. G. 514.  
 1) Verbindung (aus Tetraphenyldiphenylenpropylenoxyd). Sm. 186° (B. 29, 737). — \*II, 994.  
 2) Verbindung (aus Tetraphenyldiphenylenpropylenoxyd). Sm. 223° (B. 29, 737). — \*II, 994.
- $C_{39}H_{30}O_2$  C 88,3 — H 5,7 — O 6,0 — M. G. 530.  
 1) Verbindung (aus d. Säure  $C_{40}H_{30}O_4$ ). Sm. 220° (B. 29, 737). — \*II, 994.
- $C_{39}H_{34}O_3$  C 85,1 — H 6,2 — O 8,7 — M. G. 550.  
 1)  $\alpha\gamma\delta$ -Tribenzoyl- $\beta\delta$ -Diphenylhexan. Sm. 241—242° (Sec. 83, 362 C. 1903 [1] 577, 1129).
- $C_{39}H_{36}O_4$  C 79,6 — H 9,5 — O 10,9 — M. G. 588.  
 1) Coleleminsäure. Sm. 215° (Ar. 242, 349 C. 1904 [2] 526).
- $C_{39}H_{72}O_5$  2)  $\alpha\beta$ -Dioleat d.  $\alpha\beta\gamma$ -Trioxypropan (C. 1903 [1] 133).  
 3)  $\alpha\gamma$ -Dioleat d.  $\alpha\beta\gamma$ -Trioxypropan (C. 1903 [1] 133).
- $C_{39}H_{74}O_5$  \*1) Glycerintrilaurin. Sm. 45° (B. 36, 4344 C. 1904 [1] 434).  
 $C_{39}H_{76}O_5$  \*1) Glycerindistearin. Sm. 74,2° (B. 36, 1124 C. 1903 [1] 1312).  
 2)  $\alpha\beta$ -Distearat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 74,5° (C. 1903 [1] 133; 1904 [2] 414).  
 3)  $\alpha\gamma$ -Distearat d.  $\alpha\beta\gamma$ -Trioxypropan ( $\alpha$ -Distearin). Sm. 72,5° (C. 1903 [1] 133; 1904 [2] 414).

## — 39 III —

- $C_{39}H_{39}O_{12}N$  C 65,6 — H 5,4 — O 26,9 — N 2,0 — M. G. 713.  
 1) Adlumin (oder  $C_{39}H_{41}O_{12}N$ ). Sm. 188° (C. 1903 [1] 1142).
- $C_{39}H_{42}O_3N_4$  C 76,2 — H 6,8 — O 7,8 — N 9,1 — M. G. 614.  
 1) Carbonat d. Cinchonidin. Sm. 117° (C. 1900 [1] 319). — \*III, 641.
- $C_{39}H_{47}O_6N_3$  C 71,7 — H 7,2 — O 14,7 — N 6,4 — M. G. 653.  
 1) Verbindung (aus Phtalonsäure u. 3-Diäthylamido-1-Oxybenzol). Sm. 175° (D. R. P. 87028, 89092). — \*II, 1129.
- $C_{39}H_{53}O_{10}N$  \*1) Benzoylcevadine. Sm. 257°.  $HCl + H_2O$ ,  $HJ$ ,  $HNO_3$ , Benzoat +  $H_2O$  (B. 37, 1948 C. 1904 [2] 125).
- $C_{39}H_{61}O_2N$  C 81,4 — H 10,6 — O 5,6 — N 2,4 — M. G. 575.  
 1) Solanidin (B. 36, 3206 C. 1903 [2] 1066).

 $C_{40}$ — $C_{95}$ -Gruppen.

- $C_{40}H_{26}O_4$  C 84,2 — H 4,6 — O 11,2 — M. G. 570.  
 1) Peroxyd (aus 9-Chlor-10-Keto-9-Phenyl-9,10-Dihydroanthracen). Sm. 219° (B. 37, 3340 C. 1904 [2] 1057).
- $C_{40}H_{26}O_5$  C 81,9 — H 4,4 — O 13,7 — M. G. 586.  
 1) Dibenzoyl d. 10-Keto-9,9-Di[4-Oxyphenyl]-9,10-Dihydroanthracen. Sm. 224—225° (B. 36, 2022 C. 1903 [2] 378).
- $C_{40}H_{28}O_5$  C 81,6 — H 4,7 — O 13,6 — M. G. 588.  
 1) Anhydroverbindung d. Base  $C_{40}H_{30}O_6$ .  $HCl + \frac{1}{2}H_2O$ ,  $H_2SO_4 + \frac{1}{2}H_2O$ , Pikrat (B. 36, 3052 C. 1903 [2] 1009).
- $C_{40}H_{30}O_4$  C 83,6 — H 5,2 — O 11,2 — M. G. 574.  
 1) Säure (aus  $\alpha$ -Oxydiphenyllessigsäure). Sm. 208—210° u. Zers.  $K + H_2O$ ,  $Ag$  (B. 29, 735). — \*II, 993.
- $C_{40}H_{30}O_6$  C 79,2 — H 5,0 — O 15,8 — M. G. 606.  
 1) Dilakton d. Säure  $C_{40}H_{34}O_8$ . Sm. 168° (B. 32, 2332; B. 36, 3047 C. 1903 [2] 1008).  
 2) Base (aus der Verbindung  $C_{40}H_{28}O_5$ ).  $Na_2 + 2H_2O$ ,  $K_2 + 2H_2O$  (B. 36, 3052 C. 1903 [2] 1009).
- $C_{40}H_{34}O_2$  3) Verbindung (aus Resorcin u. Benzil) (B. 36, 3051 C. 1903 [2] 1009).  
 C 87,9 — H 6,2 — O 5,9 — M. G. 546.
- $C_{40}H_{34}O_8$  1) Peroxyd d.  $\alpha$ -Oxy-4-Methyltriphenylmethan. Sm. 170—171° (B. 37, 1633 C. 1904 [1] 1649).  
 C 74,8 — H 5,3 — O 19,9 — M. G. 642.  
 1) Säure +  $2H_2O$  (aus Resorcin u. Benzil).  $(NH_4)_2 + 2C_2H_5O$ ,  $Na_2 + 4H_2O$ ,  $Na_2 + 9H_2O$ ,  $Na_2 + 2C_2H_5O + 8H_2O$ ,  $K_2 + 2C_2H_5O$  (B. 36, 3047 C. 1903 [2] 1008).

- $C_{40}H_{41}O_{20}$  C 56,9 — H 5,2 — O 37,9 — M. G. 844.
- $C_{40}H_{46}O_{21}$  1) Erythrin +  $2H_2O$ . Sm. 146—148° (*Bz.* [3] 31, 610 *C.* 1904 [2] 98).  
C 55,7 — H 5,3 — O 39,0 — M. G. 862.
- $C_{40}H_{56}O_4$  1) Anhydrodierythrinsäure (*Bz.* [3] 31, 611 *C.* 1904 [2] 99).  
C 80,0 — H 9,3 — O 10,7 — M. G. 600.
- $C_{40}H_{66}O$  1) Careleminsäure. Sm. 215° (*Ar.* 241, 151 *C.* 1903 [1] 1029).  
2) Isocareleminsäure. Sm. 75° (*Ar.* 241, 149 *C.* 1903 [1] 1029).  
C 85,4 — H 11,7 — O 2,8 — M. G. 562.
- $C_{40}H_{68}S_5$  1) Sulfid (aus Campher). Sm. 145—155° (*B.* 36, 866 *C.* 1903 [1] 972).  
 $C_{40}H_{26}O_2N_4$  C 80,8 — H 4,4 — O 5,4 — N 9,4 — M. G. 594.
- $C_{40}H_{32}O_{14}S_2$  1) 4,4'-Di[2-Naphtylazo]-3,3'-Dioxy-2,2'-Binaphtyl (*C. r.* 138, 1618  
 $C_{40}H_{34}O_4N_8$  *C.* 1904 [2] 338).
- $C_{40}H_{38}O_9N_6$  1) Sulfonsäure (aus d. Verb.  $C_{40}H_{28}O_6$ ) (*B.* 36, 3054 *C.* 1903 [2] 1009).  
C 72,5 — H 5,1 — O 9,7 — N 12,7 — M. G. 662.
- $C_{40}H_{33}O_3Cl$  1) Bisdiazamidorsanilin (*Bz.* [3] 31, 646 *C.* 1904 [2] 109).  
C 64,3 — H 5,1 — O 19,3 — N 11,3 — M. G. 746.
- $C_{40}H_{32}O_4NCl$  1) Tetra[Phenylamidoformiat] d.  $\alpha$ -[ $\beta\gamma\delta\epsilon$ -Tetraoxyamyl]- $\beta$ -Phenyl-  
harnstoff (Arabinaminphenylharnstofftetraacarbamat). Sm. 303° u.  
Zers. (*C. r.* 136, 1081 *C.* 1903 [1] 1305).
- $C_{40}H_{32}O_6N_4S_2$  2) Verbindung (aus d. Verb.  $C_{17}H_{28}O$  aus Guttapercha). Sm. 170°  
 $C_{40}H_{50}O_{27}N_{14}P_4$  (*C.* 1903 [1] 83).
- $C_{40}H_{56}O_{20}N_{14}P_4$  1) Tri[2-Oxy-1-Naphtylmethyl]amin + Benzoylchlorid. HCl  
 $C_{41}H_{32}O_4$  (*G.* 34 [1] 221 *C.* 1904 [1] 1523).
- $C_{41}H_{32}O_{10}$  1) Dibenzylbrillantgelb (*B.* 36, 2977 *C.* 1903 [2] 1031).  
C 71,9 — H 4,7 — O 23,4 — M. G. 684.
- $C_{41}H_{34}O_6$  1) Nukleinsäure (Rhomonol) (*C.* 1904 [1] 602).  
C 81,2 — H 5,6 — O 13,2 — M. G. 606.
- $C_{41}H_{34}N_4$  1) Thymusnucleinsäure (*C.* 1903 [2] 1013).  
C 84,5 — H 5,8 — N 9,6 — M. G. 582.
- $C_{41}H_{35}N_3$  2) Methylester d. Säure  $C_{40}H_{30}O_4$ . Sm. 208—209° (*B.* 29, 736). —  
\*II, 993.
- $C_{41}H_{36}O_{12}$  1) Verbindung (aus Benzophenon u. Benzaldehyd). Sm. 236—237°  
C 86,4 — H 6,2 — N 7,4 — M. G. 569.
- $C_{41}H_{70}O_3$  1) 4-Dimethylamidophenyldi[4-Phenylamido-1-Naphtyl]methan  
(*B.* 37, 1911 *C.* 1904 [2] 115).  
C 68,3 — H 5,0 — O 26,7 — M. G. 720.
- $C_{41}H_{22}ON_4$  1) Pentaacetat d. Dichrysarobinmethylether. Sm. 135° (*Soc.* 81,  
1583 *C.* 1903 [1] 34, 167).  
C 80,6 — H 11,5 — O 7,8 — M. G. 610.
- $C_{41}H_{32}O_8N_4$  1) Verbindung (aus Cyklogallipharisäure). Sm. 48° (*Ar.* 242, 272  
*C.* 1904 [1] 1654).
- $C_{41}H_{33}O_4N$  C 83,9 — H 3,8 — O 2,7 — N 9,6 — M. G. 586.
- $C_{41}H_{34}O_2N_4$  1) Azin (aus Phenanthrenchinon u. 3,4,3',4'-Tetraamidodiphenylketon).  
Zers. bei 160° (*G.* 34 [1] 381 *C.* 1904 [2] 111).  
C 69,5 — H 4,5 — O 18,0 — N 7,9 — M. G. 708.
- $C_{41}H_{34}N_3Cl$  1) Methylendicotoindisazobenzol. Sm. 246° (*A.* 329, 277 *C.* 1904  
[1] 795).  
C 81,6 — H 5,5 — O 10,6 — N 2,3 — M. G. 603.
- 1) Tribenzyläther d. Phenolphthaleinoxim. Sm. 134° (*B.* 36, 2967  
*C.* 1903 [2] 1007).  
C 80,1 — H 5,5 — O 5,2 — N 9,1 — M. G. 614.
- 1) 3-Nitro-4-Dimethylamidophenyldi[4-Phenylamido-1-Naphtyl]-  
methan (*B.* 37, 1912 *C.* 1904 [2] 115).
- 1) Chlorid d.  $\alpha$ -Oxy- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha\alpha$ -Di[4-Phenyl-  
amido-1-Naphtyl]methan (*B.* 37, 1914 *C.* 1904 [2] 116).

- $C_{41}H_{37}O_{11}N_5$  C 63,5 — H 4,8 — O 22,7 — N 9,0 — M. G. 775.  
 1) Penta[Phenylamidoformiat] d. d-Galaktose. Sm. 275° u. Zers. (C. r. 138, 634 C. 1904 [1] 1068).  
 2) Penta[Phenylamidoformiat] d. d-Glykose. Sm. 255° (C. r. 138, 634 C. 1904 [1] 1068).
- $C_{41}H_{51}O_{10}N$  C 68,6 — H 7,1 — O 22,3 — N 2,0 — M. G. 717.  
 1) Dibenzoylcevin. Sm. 195—196°. HCl + H<sub>2</sub>O, Benzoat (B. 37, 1951 C. 1904 [2] 126).
- $C_{41}H_{44}O_{16}N_{10}Cr$  1) Verbindung (aus Diphenylcarbazid) (Bl. [3] 31, 298 C. 1904 [1] 1176).
- $C_{41}H_{74}O_{38}N_{14}P_4$  1)  $\alpha$ -Nukleinsäure. Ba (H. 39, 556 C. 1903 [2] 1285).  
 $C_{42}H_{26}O_2$  \*1) Bisdinaphtoxanthen. Sm. 300° u. Zers. (C. r. 136, 380 C. 1903 [1] 647).  
 \*1) Bisdinaphtoxanthenoxyd (C. 1904 [2] 122).  
 C 90,0 — H 5,0 — N 5,0 — M. G. 560.
- $C_{42}H_{26}O_3$  1) Naphtakrihydridin. Sm. 235—236° (225—226°) (Soc. 73, 541; B. 35, 4169 C. 1903 [1] 172).  
 $C_{42}H_{28}N_2$  C 77,8 — H 4,9 — O 17,3 — M. G. 648.
- $C_{42}H_{32}O_7$  1) Acetat d. Dilakton C<sub>40</sub>H<sub>30</sub>O<sub>6</sub>. Sm. 120° (B. 36, 3047 C. 1903 [2] 1008).  
 $C_{42}H_{32}O_9$  C 74,1 — H 4,7 — O 21,2 — M. G. 680.
- $C_{42}H_{34}O_7$  1) Tribenzoat d. Curcumin. Sm. 176—178° (Soc. 85, 63 C. 1904 [1] 729).  
 C 77,6 — H 5,2 — O 17,2 — M. G. 650.
- $C_{42}H_{30}O_{13}$  1) Verbindung (aus d. Verb. C<sub>40</sub>H<sub>28</sub>O<sub>8</sub>) (B. 36, 3053 C. 1903 [2] 1009).  
 2) Hexaacetat d. Dichrysarobin. Sm. 179—181° (Soc. 81, 1581 C. 1903 [1] 34, 167).
- $C_{42}H_{38}O_2$  C 87,8 — H 6,6 — O 5,6 — M. G. 574.  
 1) Peroxyd d.  $\alpha$ -Oxy-4,4'-Dimethyltriphenylmethan. Sm. 147 bis 148° (B. 37, 1631 C. 1904 [1] 1649).  
 2)  $\gamma\delta$ -Dioxy- $\alpha\alpha\gamma\delta\zeta\zeta$ -Hexaphenylhexan. Sm. 195° (Am. 29, 356 C. 1903 [1] 1180; Am. 31, 644 C. 1904 [2] 445).  
 $C_{42}H_{46}O_{24}$  C 54,0 — H 4,9 — O 41,1 — M. G. 934.
- $C_{42}H_{50}O_{38}$  1) Heptaacetat d. Cocacitrin. Sm. 118° (J. pr. [2] 66, 406 C. 1903 [1] 527).  
 C 44,2 — H 5,3 — O 50,5 — M. G. 1140.
- $C_{42}H_{26}N_2Cl_2$  1) Monoformiat d. Stärke (C. 1904 [2] 1029).  
 $C_{42}H_{26}N_2Br_6$  1) Bi[ $\beta$ -Naphtakridin]dichlorid. Sm. noch nicht bei 300° (Soc. 85, 1205 C. 1904 [2] 1060).  
 2) Bi[ $\alpha$ -Naphtakridin]hexabromid. Sm. 234° u. Zers. (Soc. 85, 1204 C. 1904 [2] 1060).  
 3) Bi[ $\beta$ -Naphtakridin]hexabromid (Soc. 85, 1205 C. 1904 [2] 1060).  
 $C_{42}H_{38}N_2J_6$  1) Bi[ $\alpha$ -Naphtakridin]hexajodid (Soc. 85, 1204 C. 1904 [2] 1060).  
 $C_{42}H_{30}N_8S_2$  1) 1-[4,4'-Biphenylazo]-2-Merkapto-4,5-Diphenylimidazol. Sm. 120 bis 122° u. Zers. (B. 37, 700 C. 1904 [1] 1562).
- $C_{42}H_{31}O_8Cl$  1) Verbindung (aus d. Verb. C<sub>40</sub>H<sub>28</sub>O<sub>6</sub> u. Acetylchlorid) (B. 36, 3053 C. 1903 [2] 1009).  
 $C_{42}H_{44}O_{10}N_2$  C 68,5 — H 6,0 — O 21,7 — N 3,8 — M. G. 736.
- $C_{42}H_{34}ON_2J_2$  1) Tetraacetyl pseudomorphin + 8H<sub>2</sub>O. Sm. 276° (wasserfrei). 2HCl + 4H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 6H<sub>2</sub>O) (Ar. 228, 586; A. 222, 245). — \*III, 678.
- $C_{42}H_{26}O_{11}$  1) Di[Jodäthylat] d. 5-[3-Oxyphenyl]akridinäther. Sm. 208—209° (Bl. [3] 31, 1090 C. 1904 [2] 1509).  
 C 71,9 — H 3,6 — O 24,5 — M. G. 718.
- $C_{42}H_{34}O_5$  1) Tetrabenzoat d. 3,5,7-Trioxo-2-[3,4-Dioxyphenyl]-1,4-Benzopyron (T. d. Quercetin). Sm. 239° (Ar. 229, 246). — \*III, 448.  
 C 81,9 — H 5,4 — O 12,7 — M. G. 630.
- $C_{43}H_{36}N_8$  1) Dibenzoat d.  $\alpha\delta$ -Dioxy- $\gamma$ -Keto- $\alpha\beta\delta\epsilon$ -Tetraphenylpentan. Sm. 136° (M. 24, 722 C. 1904 [1] 167).  
 C 86,4 — H 6,5 — N 7,0 — M. G. 597.
- $C_{43}H_{70}O_{10}$  1) 4-Dimethylamidophenyl-di[4-p-Methylphenylamido-1-Naphtyl]-methan (B. 37, 1911 C. 1904 [2] 115).  
 C 69,2 — H 9,4 — O 21,4 — M. G. 746.
- 1) Porin. Sm. 166° (J. pr. [2] 68, 62 C. 1903 [2] 513).

- $C_{45}H_{70}O_{15}$  C 62,5 — H 8,5 — O 29,0 — M. G. 826.  
 $C_{45}H_{72}O_2$  1) Gratiolin. Sm. 235—237° u. Zers. (*Ar.* 240, 564 *C.* 1903 [1] 42).  
 C 83,2 — H 11,6 — O 5,2 — M. G. 620.  
 $C_{45}H_{38}O_2N_4$  1) Tacamahinsäure. Sm. 95° (*Ar.* 242, 396 *C.* 1904 [2] 527).  
 C 80,4 — H 5,9 — O 5,0 — N 8,7 — M. G. 642.  
 $C_{45}H_{38}N_3Cl$  1) 3-Nitro-4-Dimethylamidophenyldi[4-p-Methylphenylamido-1-Naphtyl]methan (*B.* 37, 1912 *C.* 1904 [2] 115).  
 $C_{44}H_{22}$  1) Chlorid d.  $\alpha$ -Oxy- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha$ -Di[4-p-Methylphenylamido-1-Naphtyl]methan (*B.* 37, 1914 *C.* 1904 [2] 116).  
 C 96,0 — N 4,0 — M. G. 550.  
 $C_{44}H_{39}O_7$  1)  $\alpha\beta$ -Tri[4-Methylphenyl]äthan (*B.* 37, 1628 *C.* 1904 [1] 1648).  
 C 78,6 — H 4,8 — O 16,6 — M. G. 672.  
 $C_{44}H_{34}O_2$  1) Diacetat d. Verb.  $C_{40}H_{28}O_5$  (*B.* 36, 3053 *C.* 1903 [2] 1009).  
 C 88,9 — H 5,7 — O 5,4 — M. G. 594.  
 $C_{44}H_{34}O_7$  1) 1,4-Di[4-Oxytriphenylmethyl]benzol. Sm. 304° (*B.* 37, 2007 *C.* 1904 [2] 225).  
 C 78,3 — H 5,0 — O 16,6 — M. G. 674.  
 $C_{44}H_{34}O_8$  1) Diacetat d. Verb.  $C_{40}H_{30}O_5$  (*B.* 36, 3053 *C.* 1903 [2] 1009).  
 2) Diacetat d. Dilakton  $C_{40}H_{30}O_6$ . Sm. 161° (*B.* 36, 3047 *C.* 1903 [2] 1008).  
 $C_{44}H_{36}N_2$  C 89,2 — H 6,1 — N 4,7 — M. G. 592.  
 1) 1,4-Di[4-Amidotriphenylmethyl]benzol. Sm. 358°. 2HCl (*B.* 37, 2004 *C.* 1904 [2] 225).  
 2) 1,4-Di[ $\alpha$ -Phenylamidodiphenylmethyl]benzol. Sm. 225° (*B.* 37, 2004 *C.* 1904 [2] 225).  
 $C_{44}H_{42}O_2$  C 87,7 — H 7,0 — O 5,3 — M. G. 602.  
 $C_{44}H_{66}O_5$  1) Peroxyd d.  $\alpha$ -Oxytri[4-Methylphenyl]methan. Sm. 169—170° (*B.* 37, 1628 *C.* 1904 [1] 1648).  
 C 78,3 — H 9,8 — O 11,9 — M. G. 674.  
 $C_{44}H_{28}O_6N_2$  1) Aether d.  $\alpha$ -Oxy- $\alpha\alpha$ -Dicamphoryläthan. Sm. 90—95° (*B.* 36, 2636 *C.* 1903 [2] 626).  
 C 77,7 — H 4,1 — O 14,1 — N 4,1 — M. G. 680.  
 $C_{44}H_{43}ON$  1) Tetrabenzyllindigweiss. Sm. 217—218° (*B.* 36, 2765 *C.* 1903 [2] 835).  
 C 87,8 — H 7,2 — O 2,7 — N 2,3 — M. G. 601.  
 $C_{44}H_{50}O_5N_4$  1) Di[4-Methylphenyl]methylhydroxylamin. Sm. 155° (*B.* 37, 3161 *C.* 1904 [2] 1049).  
 C 69,3 — H 6,6 — O 16,8 — N 7,3 — M. G. 762.  
 $C_{44}H_{92}O_5N$  1) o, o-Ditolyldisazodisantonensäure. Sm. 164—166° (*B.* 36, 1396 *C.* 1903 [1] 1360).  
 $C_{44}H_{48}O_5N_4Cl_2$  1) Pseudoerebrin. Sm. 210° (212°) (*H.* 43, 22 *C.* 1904 [2] 1550).  
 1) Verbindung (aus s-Dichlormethyläther u. Strychnin). + 2AuCl<sub>3</sub> (*A.* 330, 117 *C.* 1904 [1] 1063).  
 $C_{44}H_{60}O_6N_2Br_2$  1) Dibebeerinxylylenammoniumbromid. Sm. 258° (*Ar.* 236, 539).  
 — \*III, 621.  
 $C_{45}H_{38}O_6$  \*1) Glycerintrimyristin. Sm. 55° (*B.* 36, 4344 *C.* 1904 [1] 434).  
 $C_{45}H_{30}O_{15}N_{10}$  C 56,8 — H 3,2 — O 25,3 — N 14,7 — M. G. 950.  
 1) Verbindung (aus 1,3-Dinitrobenzol u. Aceton). Ba (*B.* 37, 836 *C.* 1904 [1] 1201).  
 $C_{45}H_{34}O_7Si$  1) Tri[Dibenzoylmethyl]siliciumhydroxyd. Salze siehe (*B.* 36, 1599 *C.* 1903 [2] 30; *B.* 36, 3209 *C.* 1903 [2] 1058).  
 $C_{45}H_{33}O_6ClSi$  1) Tri[Dibenzoylmethyl]siliciumchlorid. HCl, + FeCl<sub>3</sub>, + AuCl<sub>3</sub> (*B.* 36, 1599 *C.* 1903 [2] 30; *B.* 36, 3209 *C.* 1903 [2] 1058).  
 $C_{45}H_{33}O_6BrSi$  1) Tri[Dibenzoylmethyl]siliciumbromid.  $\frac{1}{2}$ HBr, HBr (*B.* 36, 3210 *C.* 1903 [2] 1058).  
 $C_{45}H_{33}O_6JSi$  1) Tri[Dibenzoylmethyl]siliciumjodid. + J<sub>2</sub> (*B.* 36, 3211 *C.* 1903 [2] 1058).  
 $C_{46}H_{78}O_{20}N_{10}S$  1) Verbindung (aus Pferdehaar) (*C.* 1903 [2] 128).  
 $C_{46}H_{34}O_9$  C 89,3 — H 5,5 — O 5,2 — M. G. 618.  
 1) Peroxyd d.  $\alpha$ -Oxydiphenyl-1-Naphtylmethan (*B.* 37, 1638 *C.* 1904 [1] 1649).  
 $C_{46}H_{40}N_2$  C 89,0 — H 6,4 — N 4,5 — M. G. 620.  
 1) 1,4-Di[4-Amido-3-Methyltriphenylmethyl]benzol. Sm. 277°. 2HCl (*B.* 37, 2005 *C.* 1904 [2] 225).

- $C_{46}H_{80}O_6$  C 75,8 — H 11,0 — O 13,2 — M. G. 728.  
 1)  $\beta$ -Benzoat- $\alpha\gamma$ -Distearat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 64° (C. 1903 [1] 134).  
 $C_{46}H_{50}ON_8$  C 78,6 — H 7,1 — O 2,3 — N 12,0 — M. G. 702.  
 1) 3,3'-Di[Di(4-Dimethylamidophenyl)methyl]azoxybenzol. Sm. 176° (B. 36, 3472 C. 1903 [2] 1269).  
 $C_{46}H_{85}O_{20}N_8S$  1) Farbstoff (aus schwarzer Schafwolle) (C. 1903 [2] 128).  
 $C_{47}H_{54}O_{16}$  C 64,5 — H 6,2 — O 29,3 — M. G. 874.  
 1) Filmaron (oder  $C_{47}H_{52}O_{16}$ ). Ca (C. 1903 [1] 1090; Ar. 242, 490 C. 1904 [2] 1417).  
 $C_{48}H_{28}O_{11}$  1) Tetrabenzoat d. Phloroglucinphtalein (B. 36, 1072 C. 1903 [1] 1181).  
 $C_{48}H_{34}N_2$  C 90,3 — H 5,3 — N 4,4 — M. G. 638.  
 1) 2,3,5,6-Tetraphenyl-1,4-Di[1-Naphtyl]-1,4-Dihydro-1,4-Diazin. Sm. 223° (C. r. 138, 1612 C. 1904 [2] 344).  
 $C_{48}H_{44}N_2$  C 88,9 — H 6,8 — N 4,3 — M. G. 648.  
 1) 1,4-Di[4-Methylamido-3-Methyltriphenylmethyl]benzol. Sm. 287° (B. 37, 2006 C. 1904 [2] 225).  
 $C_{48}H_{68}O_{20}$  C 59,7 — H 7,0 — O 33,2 — M. G. 904.  
 1) Pentaacetat d. Strophantin. Sm. 236—238° (M. 19, 396). — \*III, 476.  
 $C_{48}H_{32}O_{41}$  2) Verbindung (aus Glykose). =  $(C_6H_{10}O_6)_8 + H_2O$  (A. 329, 356 C. 1904 [1] 436).  
 $C_{48}H_{36}O_2N_2$  C 85,7 — H 5,3 — O 4,8 — N 4,2 — M. G. 672.  
 1) Ketazin d. 3-Benzoylmethyl-2,5-Diphenylfuran. Sm. 219—220° (B. 36, 2434 C. 1903 [2] 503).  
 $C_{49}H_{40}O_2N_2$  C 85,2 — H 5,9 — O 4,7 — N 4,1 — M. G. 676.  
 1) 1,4-Di[4-Acetylamidotriphenylmethyl]benzol. Sm. 231° (B. 37, 2005 C. 1904 [2] 225).  
 $C_{49}H_{44}O_{12}N_6$  C 64,3 — H 4,9 — O 21,4 — N 9,4 — M. G. 896.  
 1) Hexa[Phenylamidoformiat] d. Dulcit. Sm. 315° (C. r. 138, 635 C. 1904 [1] 1068).  
 2) Hexa[Phenylamidoformiat] d. d-Mannit. Sm. 303° (C. r. 138, 635 C. 1904 [1] 1068).  
 $C_{49}H_{36}O_{18}$  C 70,7 — H 4,3 — O 25,0 — M. G. 832.  
 1) Tetrabenzoat d. Barbaloin (C. 1903 [1] 234; Bz. [3] 21, 672). — \*III, 453.  
 $C_{49}H_{48}O_8N_{12}$  C 63,1 — H 5,1 — O 13,7 — N 18,0 — M. G. 932.  
 1) Tetra[Benzylidenhydrazid] d. Hippurylasparagylasparaginsäure. Sm. oberh. 150° u. Zers. (J. pr. [2] 70, 190 C. 1904 [2] 439).  
 $C_{50}H_{34}O_{11}$  3) Pentabenzoat d. Cyanomaklurin. Sm. 171—173° (C. 1904 [2] 439).  
 $C_{50}H_{40}O_{14}$  C 69,4 — H 4,6 — O 25,9 — M. G. 864.  
 1) Tetrabenzoat d. Homonataloin (C. r. 128, 1403; C. 1903 [1] 291; Bz. [3] 27, 1229 C. 1903 [1] 401). — \*III, 455.  
 $C_{50}H_{30}O_2$  C 84,3 — H 11,2 — O 4,5 — M. G. 712.  
 1) Verbindung (aus Kautschuk) (C. 1904 [2] 705).  
 2) Verbindung (aus Pontianakharz) (C. 1904 [1] 518).  
 $C_{50}H_{54}O_6N_4$  C 74,4 — H 6,7 — O 11,9 — N 6,9 — M. G. 806.  
 1) 1,3-Xylylendistrychniniumhydroxyd. Bromid, Pikrat (B. 36, 1680 C. 1903 [2] 29).  
 $C_{50}H_{34}O_4N_4Br_2$  2) 1,3-Xylylendistrychniniumbromid. + 6  $CH_4O$  (B. 36, 1680 C. 1903 [2] 29).  
 $C_{50}H_{58}O_{12}N_8S$  1) Farbstoff (aus schwarzem Rosshaar) (C. 1903 [2] 128).  
 $C_{51}H_{42}O_{14}$  C 69,7 — H 4,8 — O 25,5 — M. G. 878.  
 1) Tetrabenzoat d. Nataloin (C. 1903 [1] 291; Bz. [3] 27, 1229 C. 1903 [1] 401). — \*III, 454.  
 $C_{51}H_{98}O_8$  \*1) Tripalmitat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 65,5° (C. 1903 [1] 133).  
 $C_{51}H_{102}O_3$  C 80,3 — H 13,4 — O 6,3 — M. G. 762.  
 1) trim. Aldehyd d. Margarinsäure. Sm. 77—78° (Soc. 85, 835 C. 1904 [2] 509).  
 $C_{52}H_{70}O_{81}$  C 52,4 — H 5,9 — O 41,7 — M. G. 1190.  
 1) Tetradekaacetat eines Mannotettrasaccharid (aus Salepschleim) (B. 36, 3201 C. 1903 [2] 1055).  
 $C_{52}H_{92}O_{23}$  \*1) Aphrodäscin (C. 1903 [2] 1133).

- $C_{52}H_{94}O_{11}$  C 69,8 — H 10,5 — O 19,7 — M. G. 894.  
 1) Anhydrid d. Diacetoxybehensäure. Sm. 63° (B. 36, 3606 C. 1903 [2] 1314).  
 $C_{52}H_{97}O_{15}N$  C 61,5 — H 8,7 — O 28,4 — N 1,4 — M. G. 1013.  
 1) Solanin (B. 36, 3204 C. 1903 [2] 1066).  
 $C_{52}H_{93}O_{18}N$  \* 1) Solanin (B. 36, 3554 C. 1903 [2] 1376).  
 $C_{52}H_{92}O_4N_4S_4$  1) Farbstoff (aus Chinizarinhydrür u. 2,2'-Diamidodiphenyldisulfid) (C. 1904 [2] 1175).  
 $C_{52}H_{99}O_{18}N_6S$  1) Hippomelanin +  $\frac{1}{2}H_2O$  (J. Th. 1886, 478). — \*III, 491.  
 $C_{52}H_{80}O_{40}N_{20}P_4$  1) Guanylsäure (C. 1903 [2] 385).  
 $C_{53}H_{100}O_6$  C 76,4 — H 12,0 — O 11,5 — M. G. 832.  
 1) Glycerindipalmitinolein. Sm. 29,2° (33—34°) (M. 24, 411 C. 1903 [2] 629; M. 25, 932 C. 1904 [2] 1617).  
 $C_{58}H_{102}O_6$  C 76,3 — H 12,2 — O 11,5 — M. G. 834.  
 1)  $\alpha\beta$ -Dipalmitat- $\gamma$ -Stearat d.  $\alpha\beta\gamma$ -Trioxypopropan. Sm. 60° (C. 1903 [1] 134).  
 2)  $\alpha\gamma$ -Dipalmitat- $\beta$ -Stearat d.  $\alpha\beta\gamma$ -Trioxypopropan. Sm. 60° (C. 1903 [1] 134).  
 $C_{58}H_{84}O_8N_4$  C 82,2 — H 4,4 — O 6,2 — N 7,2 — M. G. 774.  
 1) Azin (aus Phenanthrenchinon u. 3,3'-Diamido-4,4'-Di[Phenylamido]-diphenylketon). Sm. 220° (G. 34 [1] 379 C. 1904 [2] 111).  
 $C_{54}H_{88}O_8$  C 79,6 — H 4,7 — O 15,7 — M. G. 814.  
 1) Dibenzooat d. Dilakton  $C_{40}H_{80}O_8$ . Sm. 208° (B. 36, 3047 C. 1903 [2] 1008).  
 $C_{54}H_{50}O_{16}N_6$  C 62,4 — H 4,8 — O 24,7 — N 8,1 — M. G. 1038.  
 1) Hexa[Phenylamidoformiat] d. Cellose. Sm. 280° (Bl. [3] 31, 857 C. 1904 [2] 644).  
 $C_{54}H_{106}O_6B$  1) Gem. Anhydrid d. Stearinsäure u. Borsäure. Sm. 73° (B. 36, 2224 C. 1903 [2] 421).  
 $C_{54}H_{42}O_6N_2S_6$  1) Verbindung (aus 2,5-Dimerkapto-1,4-Benzochinon-2,5-Diphenyläther). Sm. 235° (A. 336, 143 C. 1904 [2] 1299).  
 $C_{55}H_{106}O_6$  C 76,6 — H 12,3 — O 11,1 — M. G. 862.  
 1)  $\alpha$ -Palmitat- $\beta\gamma$ -Distearat d.  $\alpha\beta\gamma$ -Trioxypopropan ( $\alpha$ -Palmitodistearin). Sm. 63° (C. 1903 [1] 134; B. 36, 1125 C. 1903 [1] 1312; C. 1904 [2] 414).  
 2)  $\beta$ -Palmitat- $\alpha\gamma$ -Distearat d.  $\alpha\beta\gamma$ -Trioxypopropan ( $\beta$ -Palmitodistearin). Sm. 63° (B. 36, 2767 C. 1903 [2] 896; C. 1904 [2] 414).  
 $C_{55}H_{40}O_{10}N_2$  C 74,3 — H 4,5 — O 18,0 — N 3,1 — M. G. 888.  
 1) Benzoylderivat d. Suprarenin (M. 24, 282 C. 1903 [2] 302). — \*III, 667.  
 $C_{55}H_{104}O_6ClJ$  \* 1) Chloridjodid d. Glycerid  $C_{55}H_{101}O_6$  (B. 35, 4307 C. 1903 [1] 297).  
 $C_{56}H_{40}$  C 94,5 — H 4,5 — M. G. 712.  
 1) bim. 9,10-Dibenzylidenanthracen. Sm. 184° (M. 25, 797 C. 1904 [2] 1137).  
 $C_{56}H_{40}O_{14}$  C 71,8 — H 4,3 — O 23,9 — M. G. 936.  
 1) Pentabenzoat d. Barbaloin (C. 1903 [1] 234).  
 $C_{56}H_{42}O$  C 92,1 — H 5,7 — O 2,2 — M. G. 730.  
 1) Aether d. 9-[ $\alpha$ -Oxybenzyl]-10-Benzylanthracen. Sm. 213—215° (M. 25, 804 C. 1904 [2] 1137).  
 $C_{56}H_{86}O_4$  C 81,7 — H 10,5 — O 7,8 — M. G. 822.  
 1) Dicholesterylester d. Oxalsäure. Sm. 224° (M. 24, 665 C. 1903 [2] 1236).  
 $C_{56}H_{108}O_6$  C 76,7 — H 12,3 — O 11,0 — M. G. 876.  
 1) Glycerid (aus Schweinefett). Sm. 66° (B. 36, 2771 C. 1903 [2] 896; C. 1904 [2] 414).  
 $C_{56}H_{26}O_6N_4$  C 76,2 — H 2,9 — O 14,5 — N 6,4 — M. G. 882.  
 1) 1,2,2',1'-Anthrachinonazhydrin (B. 36, 3432 C. 1903 [2] 1279).  
 $C_{56}H_{36}O_{14}Cl_4$  1) Pentabenzoat d. Tetrachlorbarbaloin (Bl. [3] 21, 675). — \*III, 453.  
 $C_{56}H_{50}O_9N_2$  C 75,2 — H 5,6 — O 16,1 — N 3,1 — M. G. 894.  
 1) Tribenzoylmethylpseudomorphin. 2HCl, (2HCl, PtCl<sub>4</sub>) (A. 294, 217). — \*III, 678.  
 $C_{56}H_{51}O_{14}N_7$  C 64,2 — H 5,0 — O 21,4 — N 9,4 — M. G. 1045.  
 1) Hepta[Phenylamidoformiat] d. Perseit. Sm. 297° (C. r. 138, 635 C. 1904 [1] 1068).

- $C_{57}H_{96}$  C 95,0 — H 5,0 — M. G. 720.  
 1) Tribenzyltrinaptylenbenzol (Tribenzyldekacylen). Sm. 270° (*Bl.* [3] 31, 930 *C.* 1904 [2] 779).
- $C_{57}H_{104}O_6$  \*1) Tricoleat d.  $\alpha\beta\gamma$ -Trioxypropan (*C.* 1903 [1] 133).  
 $C_{57}H_{108}O_6$  \*1) Glycerinoleindistearin. Sm. 42° (44°) (*B.* 36, 2772 *C.* 1903 [2] 897; *M.* 25, 931 *C.* 1904 [2] 1617).
- $C_{57}H_{110}O_6$  \*1) Tristearat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 71—71,5° (*C.* 1903 [1] 133).  
 $C_{57}H_{58}O_{12}N_{16}$  C 59,1 — H 5,0 — O 16,6 — N 19,3 — M. G. 1158.  
 1) Hydrazitetra [Benzylidenhydrazid] d. Hippuryldiasparagyl-asparaginsäure. Sm. 190° (*J. pr.* [2] 70, 193 *C.* 1904 [2] 1398).
- $C_{61}H_{98}O_{20}N_{10}S$  1) Verbindung (aus weisser Schafwolle) (*C.* 1903 [2] 128).  
 $C_{62}H_{50}O_{10}N_2S_8$  1) Tetraacetat d. Verb.  $C_{54}H_{42}O_8N_2S_8$ . Sm. 163° (*A.* 336, 144 *C.* 1904 [2] 1299).  
 C 79,2 — H 5,7 — O 15,1 — M. G. 954.  
 1) polym. Benzaldehyd. Sm. 125—130° (*B.* 36, 1575 *C.* 1903 [1] 1397).  
 C 63,0 — H 9,5 — O 24,0 — N 3,5 — M. G. 1199.
- $C_{63}H_{118}O_{18}N_8$  1) Tri[ $\beta$ -Nitro- $\beta$ -Oxystearat] d.  $\alpha\beta\gamma$ -Trioxypropan (*C.* 1904 [1] 261).  
 C 71,6 — H 4,5 — O 23,9 — M. G. 1072.
- $C_{64}H_{43}O_{16}$  1) Hexabenzoat d. Homonataloïn (*C. r.* 128, 1403; *Bl.* [3] 27, 1229 *C.* 1903 [1] 401). — \*III, 455.  
 C 71,8 — H 4,6 — O 23,8 — M. G. 1086.
- $C_{65}H_{50}O_{16}$  1) Hexabenzoat d. Nataloïn (*C.* 1903 [1] 291; *Bl.* [3] 27, 1229 *C.* 1903 [1] 401). — \*III, 454.
- $C_{66}H_{48}O_8S_8$  1) Verbindung (aus 2,5-Dimerkapto-1,4-Benzochinondiphenyläther u. 2 Molec. 2,3,5-Trimerkapto-1,4-Dioxybenzol-2,3,5-Triphenyläther). Sm. 164° (*A.* 336, 146 *C.* 1904 [2] 1299).  
 C 63,1 — H 4,8 — O 23,5 — N 8,6 — M. G. 1294.
- $C_{68}H_{82}O_{18}N_8$  1) Okto[Phenylamidoformiat] d. Milchwucker. Sm. 275—280° (*C. r.* 138, 635 *C.* 1904 [1] 1068).  
 2) Okto[Phenylamidoformiat] d. Trehalose. Sm. 283° (*C. r.* 138, 635 *C.* 1904 [1] 1068).  
 C 75,0 — H 3,3 — O 21,7 — M. G. 1104.
- <sup>15</sup> 1) Hexabenzoat d. Tridioxybenzoylenbenzol (*B.* 33, 2442). — \*III, 245.
- <sup>5</sup> $N_9Fe$  1) Verbindung (aus Hämin) (*H.* 40, 427 *C.* 1904 [1] 680).  
<sup>18</sup> $N_9S_6$  1) Penta[2-Naphtylsulfonat] d. Glutokyrin +  $H_2O$ . Sm. 137 bis 138° (*C.* 1903 [1] 1145; 1903 [2] 580).  
 C 74,0 — H 5,8 — O 17,8 — N 2,4 — M. G. 1168.
- <sup>13</sup> $N_2$  1) Verbindung (aus Formaldehyd u. 2-Oxynaphtalin). Sm. 158—160° (*G.* 34 [1] 215 *C.* 1904 [1] 1523).  
 C 59,0 — H 6,5 — O 34,5 — M. G. 1484.
- <sup>82</sup> 1) Tetrabenzoylconvolvulinsäure. Sm. 115—118° (*C.* 1897 [1] 419). — \*III, 435.  
 C 71,0 — H 4,8 — O 24,2 — M. G. 1386.
- <sup>21</sup> 1) Dekabenzoylanhydrodimannit. Sm. 155—156° (*Bl.* [3] 31, 619 *C.* 1904 [2] 97).
- <sup>5</sup> $N_{11}Fe$  1) Verbindung (aus Hämin) (*H.* 40, 425 *C.* 1904 [1] 680).  
<sup>12</sup> $Br_2Si_2$  1) Verbindung (aus Dibenzoylmethan) (*B.* 36, 3211 *C.* 1903 [2] 1058).  
<sup>61</sup> $N_{27}P_{10}$  1)  $\beta$ -Nukleinsäure. Ba (*H.* 39, 557 *C.* 1903 [2] 1285).  
<sup>17</sup> $N_{11}$  C 62,8 — H 4,9 — O 23,8 — N 8,5 — M. G. 1813.  
 1) Undeka[Phenylamidoformiat] d. Melezitose. Sm. 180° u. Zers. (*C. r.* 138, 635 *C.* 1904 [1] 1068).

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# Register der Eigennamen.

Abieten  $C_{18}H_{28}$   
 Abiotesen  $C_{20}H_{30}O$   
 Abyssinin  $C_{26}H_{44}O_{13}$   
 Acakatechin  $C_{15}H_{14}O_6$   
 Acocantherin  $C_{30}H_{46}O_{13}$   
 Adlumin  $C_{39}H_{39}O_{12}N$   
 Adrenalin  $C_9H_{19}O_3N$   
 Adrenalon  $C_9H_{11}O_3N$   
 Aethylroth  $C_{23}H_{25}N_2J$   
 Alkonin  $C_{26}H_{41}O_6N$   
 Albanan  $C_{30}H_{44}O$   
 Alectorinsäure  $C_{27}H_{24}O_{13}$   
 Alizarincyaningrün  
 $C_{28}H_{22}O_6N_2S$   
 Alizarinirisol  $C_{21}H_{16}O_6NS$   
 Alizarinreinblau  
 $C_{21}H_{15}O_5N_2BrS$   
 Alkannagrün  $C_{34}H_{44}O_8$   
 Alkannaroth  $C_{30}H_{32}O_7$   
 Alkannasäure  $C_{30}H_{32}O_7$   
 Allomerochinen  $C_9H_{15}O_2N$   
 Alochrysin  $C_{15}H_8O_5$   
 Aloin  $C_{15}H_{18}O_7$   
 Aloresinotannol  $C_{23}H_{20}O_8$   
 Alstol  $C_{24}H_{38}O$   
 Alstonin  $C_{14}H_{22}O$   
 Alumidin  $C_{30}H_{20}O_9N$   
 Amorphin  $C_{15}H_{24}$   
 Anchusaroth  $C_{30}H_{25}O_8$   
 Anchusasäure  $C_{10}H_{22}O_8$   
 Anhydrodierythrinsäure  
 $C_{40}H_{46}O_{21}$   
 Anilopyrin  $C_{17}H_{17}N_3$   
 Anthesterin  $C_{28}H_{48}O$   
 Anthracinon  
 $C_{14}H_{10}O_2$   
 Apionol  $C_9H_8O_4$   
 Apopinol  $C_{10}H_{18}O$   
 Ardisiol  $C_{35}H_{38}O_{10}$   
 Areolatin  $C_{12}H_{10}O_7$   
 Areolatol  $C_9H_8O_4$   
 Arnisterin  $C_{28}H_{18}O_9$   
 Artemisinsäure  $C_{15}H_{18}O_3$   
 Aspidin  $C_{26}H_{32}O_9$   
 Atractylen  $C_{15}H_{24}$   
 Atractylol  $C_{15}H_{28}O$   
 Atranorsäure  $C_{20}H_{18}O_9$   
 Aucubigenin  $C_7H_8O_3$   
 Aucubin  $C_{13}H_{10}O_8$

Barringtogenin  $C_{10}H_{16}O_3$   
 Barringtogenitin  $C_{16}H_{24}O_3$   
 Barringtonin  $C_{18}H_{28}O_{10}$   
 Beljiabieninsäure  $C_{13}H_{20}O_2$   
 Beljiabietinolsäure  $C_{16}H_{24}O_2$   
 Beljiabietinsäure  $C_{20}H_{30}O_2$   
 Beljeresin  $C_{11}H_{16}O$   
 Benzaurin  $C_{16}H_{18}O_3$   
 Benzotrioazonid  $C_6H_6O_9$   
 Betasterin  $C_{26}H_{44}O$   
 Bilipurpurin  $C_{32}H_{34}O_5N_4$   
 Biscumarin  $C_{18}H_{12}O_4$   
 Bisdinaphthopyryl  $C_{42}H_{26}O_2$   
 Brasan  $C_{16}H_{16}O$   
 Butein  $C_{17}H_{12}O_5$   
 Butin  $C_{15}H_{12}O_5$

Calaminthion  $C_{10}H_{16}O$   
 Camphancarbonsäure  
 $C_{11}H_{18}O_2$   
 Campherisochinon  $C_{10}H_{14}O_2$   
 Campholandiol  $C_{10}H_{20}O_2$   
 Campholenalkohol  $C_{10}H_{18}O$   
 Cannabinol  $C_{21}H_{30}O_2$   
 Carbousninsäure  $C_{19}H_{18}O_5$   
 Careleminsäure  $C_{40}H_{56}O_4$   
 Careleresen  $C_{27}H_{40}O_2$   
 Carielemisäure  $C_{33}H_{56}O_4$   
 Carielemisäure  $C_{37}H_{60}O_4$   
 Casimirin  $C_{30}H_{38}O_5N_2$   
 Casinirol  $C_{27}H_{48}O_2$   
 Ceratophyllin  $C_{10}H_{12}O_4$   
 Cerebronsäure  $C_{26}H_{50}O_3$   
 Ceropten  $C_{18}H_{18}O_4$   
 Cetrarin  $C_{26}H_{26}O_{12}$   
 Cetratasäure  $C_{26}H_{24}O_{14}$   
 Chaulmoograsäure  $C_{18}H_{32}O_2$   
 Chaulmoogren  $C_{18}H_{34}$   
 Chaulmoogrylalkohol  
 $C_{18}H_{34}O$   
 Chinizarinblau  $C_{21}H_{15}O_3N$   
 Chinizarinrot  $C_{28}H_{22}O_2N_2$   
 Chinizarinrot  $C_{22}H_{17}N_5$   
 Chinoxalophenanthrazin  
 $C_{22}H_{12}N_4$   
 Chitoheptonsäure  $C_7H_{14}O_8$   
 Cholestandion  $C_{27}H_{42}O_2$   
 Cholestanonol  $C_{27}H_{44}O_2$   
 Cholestenon  $C_{27}H_{44}O$

Chrysarobin  $C_{15}H_{12}O_3$   
 Ciliansäure  $C_{20}H_{28}O_8$   
 Cineolen  $C_{10}H_{18}$   
 Clupein  $C_{30}H_{52}O_9N_{14}$   
 Clupeon  $C_{28}H_{50}O_6N_{14}$   
 Cocacetin  $C_{16}H_{12}O_7$   
 Cocacitrin  $C_{28}H_{32}O_{17}$   
 Cocafavetin  $C_{22}H_{18}O_9$   
 Cocafavin  $C_{24}H_{38}O_{19}$   
 Cocaeose  $C_8H_{12}O_3$   
 Cocasäure  $C_{18}H_{16}O_4$   
 Codeinon  $C_{18}H_{16}O_3N$   
 Coleleminsäure  $C_{39}H_{56}O_4$   
 Cumaran  $C_8H_8O$   
 Cusparein  $C_{34}H_{38}O_3N_5$   
 Cyanomaklurin  $C_{15}H_{14}O_6$   
 Cyklamlin  $C_{26}H_{40}O_{12}$   
 Cyklamiretin  $C_{14}H_{22}O_2$   
 Cyklen  $C_{10}H_{16}$   
 Cyklogallipharol  $C_{20}H_{38}O$   
 Cyklogallipharsäure  
 $C_{21}H_{38}O_8$   
 Cytilosidin  $C_{11}H_{15}N$   
 Cytilosin  $C_{11}H_{11}ON$   
 Cytisolsäure  $C_{11}H_9O_5N$   
 Cytosin  $C_4H_5ON_3$

Decocacetin  $C_{16}H_{14}O_6$   
 Dehydrochinin  $C_{20}H_{22}O_2N_2$   
 Dehydrochloridhämין  
 $C_{34}H_{32}O_4N_4Fe$   
 Dehydrocinchonidin  
 $C_{19}H_{26}ON_2$   
 Dehydrohämatin  
 $C_{34}H_{32}O_4N_4Fe$   
 Diazopapaverin  $C_{20}H_{19}O_4N_3$   
 Dicamphendion  $C_{20}H_{28}O_2$   
 Dicampherpinakon  $C_{20}H_{32}O_2$   
 Dichrysarobin  $C_{30}H_{24}O_7$   
 Digitsäure  $C_{20}H_{30}O_8$   
 Diindigotin  $C_{22}H_{16}O_4N_4$   
 Diffusin  $C_{31}H_{38}O_{10}$   
 Dinaphthylfluoridin  $C_{22}H_{14}N_4$   
 Dinaphthylanthiophen  
 $C_{24}H_{12}S$   
 Diosin  $C_{24}H_{38}O_9$   
 Dulcid  $C_8H_{10}O_4$   
 Dypnopinakolen  $C_{25}H_{22}$

Elaeomargarinsäure  $C_{18}H_{32}O_2$   
 Emetin  $C_{28}H_{40}O_9N_2$   
 Epinephrin  $C_{10}H_{13}O_3N$   
 Epinephrinhydrat  $C_9H_{13}O_3N$   
 Erythrin  $C_{40}H_{44}O_{20}$   
 Eudesmin  $C_{26}H_{30}O_8$   
 Eupophin  $C_{18}H_{20}O_2NBr$   
 Evbernuröl  $C_{23}H_{26}O_7$   
 Evernursäure  $C_{24}H_{26}O_9$   
 Euphorbon  $C_{27}H_{44}O$

Farnesol  $C_{15}H_{26}O$   
 Filmaron  $C_{47}H_{54}O_{16}$   
 Flavanon  $C_{15}H_{12}O_3$   
 Flavonol  $C_{15}H_{10}O_3$   
 Fluoresceinsäure  $C_{20}H_{14}O_6$   
 Fukonsäure  $C_8H_{12}O_6$   
 Fukugetin  $C_{17}H_{12}O_6$

Galbanumsäure  $C_{13}H_{20}O_2$   
 Galipol  $C_{15}H_{26}O$   
 Gallipharinsäure  $C_{16}H_{32}O_2$   
 Galloflavin  $C_{15}H_9O_{10}$   
 Gallorubin  $C_{18}H_9O_5N$   
 Globulariacitrin  $C_{37}H_{30}O_{16}$   
 Globulariasäure  $C_{28}H_{32}O_7$   
 Glutokyrin  $C_{21}H_{29}O_8N_9$   
 Glykogallin  $C_{13}H_{16}O_{10}$   
 Gratiogenin  $C_{31}H_{50}O_5$   
 Gratioligenin  $C_{37}H_{50}O_{10}$   
 Gratiolin  $C_{45}H_{70}O_{15}$   
 Gratiolon  $C_{30}H_{48}O_8$   
 Guajen  $C_{15}H_{22}$   
 Guanylsäure  $C_{53}H_{30}O_{40}N_{20}P_4$   
 Gurjoresin  $C_{17}H_{28}O_2$   
 Gurjoresinolsäure  $C_{16}H_{26}O_4$   
 Gurjuresinol  $C_{15}H_{26}O$   
 Gurjuturboretinol  $C_{20}H_{30}O_2$   
 Gynocardiasäure  $C_{21}H_{40}O_2$

Hämatoporphyrin  
 $C_{34}H_{38}O_8N_4$   
 Hämin  $C_{34}H_{38}O_8N_4ClFe$   
 Heminukleinsäure  
 $C_{35}H_{51}O_{25}N_9P_4$   
 Herniariasäure  $C_{28}H_{49}O_{14}$   
 Herniarin  $C_{34}H_{59}O_{19}$   
 Hippomelanin  $C_{32}H_{36}O_{18}N_9S$   
 Hippurylasparaginsäure  
 $C_{13}H_{14}O_6N_2$   
 Hippurylasparagylasparagin-  
 säure  $C_{21}H_{24}O_{12}N_4$   
 Homomaticosäure  $C_{11}H_{12}O_6$

Indanthren  $C_{28}H_{14}O_4N_2$   
 Indenophenazinglykolsäure  
 $C_{16}H_{10}O_3N_9$   
 Indophtalol  $C_{26}H_{20}O_3N_2$   
 Indophtenin  $C_{14}H_7ONS_2$   
 Isoallitursäure  $C_6H_8O_4N_4$   
 Isoalstonin  $C_{14}H_{22}O$

Isoanemonin  $C_{10}H_8O_4$   
 Isoanemonensäure  $C_{10}H_{10}O_5$   
 Isobiliansäure  $C_{24}H_{34}O_8$   
 Isocareleminsäure  $C_{40}H_{50}O_4$   
 Isocarieleminsäure  $C_{36}H_{50}O_4$   
 Isococasäure  $C_{18}H_{16}O_4$   
 Isocoleleminsäure  $C_{37}H_{50}O_4$   
 Isodicampher  $C_{20}H_{30}O_2$   
 Isohydranisoil  $C_{16}H_{18}O_4$   
 Isolaudanin  $C_{20}H_{25}O_4N$   
 Isoleucin  $C_9H_{13}O_2N$   
 Isomyristicin  $C_{11}H_{12}O_3$   
 Isoolivil  $C_{20}H_{24}O_7$   
 Isophellogensäure  $C_{21}H_{40}O_4$   
 Isophellonsäure  $C_{22}H_{42}O_3$   
 Isopurpurgallol  $C_{11}H_6O_5$   
 Isopyrin  $C_{28}H_{46}O_5N$   
 Isopyrophtalon  $C_{14}H_9O_2N$   
 Isorhodeose  $C_6H_{12}O_5$   
 Isorosindonsäure  $C_{22}H_{14}O_8N_2$   
 Isosphäritbalban  $C_{30}H_{44}O_2$   
 Isotaceleminsäure  $C_{37}H_{50}O_4$   
 Isoxazol  $C_8H_9ON$   
 Isoxyllon  $C_{12}H_{18}O$

Karakin  $C_{15}H_{24}O_{15}N_8$   
 Kaseansäure  $C_9H_{16}O_7N_2$   
 Kaseinokyrin  $C_{22}H_{47}O_8N_9$   
 Kaseinsäure  $C_{12}H_{24}O_5N_2$   
 Kristallalban  $C_{15}H_{26}O$   
 Kryogenin  $C_8H_{10}O_2N_4$

Laktukol  $C_{21}H_{34}O$   
 Laktukon  $C_{23}H_{30}O_2$   
 Laricopininsäure  $C_{21}H_{30}O_3$   
 Laricopinonsäure  $C_{20}H_{28}O_4$   
 Larixinsäure  $C_6H_8O_3$   
 Leiphämsäure  $C_{22}H_{40}O_5$   
 Lepranthasäure  $C_{20}H_{22}O_2$   
 Lepranthin  $C_{26}H_{40}O_{10}$   
 Leprariasäure  $C_{19}H_{18}O_9$   
 Lupinidin  $C_{15}H_{28}N_2$   
 Lutidon  $C_7H_9ON$   
 Lygosin  $C_{17}H_{14}O_3$

Maclayetin  $C_{11}H_{15}O_4$   
 Maclayin  $C_{17}H_{32}O_{10}$   
 Malachitgrün  $C_{22}H_{20}ON_2$   
 Mannamin  $C_6H_{15}O_5N$   
 Maretin  $C_8H_{11}ON_3$   
 Masticinsäure  $C_{23}H_{36}O_4$   
 Masticolsäure  $C_{23}H_{36}O_4$   
 Maticonsäure  $C_{32}H_{48}O_4$   
 Masticoresen  $C_{35}H_{58}O_4$   
 Matikocampher  $C_{15}H_{26}O$   
 Mesoporphyrin  $C_{34}H_{36}O_4N_4$   
 Mesotan  $C_9H_{10}O_4$   
 Metacopaivasäure  $C_{11}H_{16}O_2$   
 Metochinon  $C_{20}H_{24}O_4N_2$   
 Musculamin  $C_5H_{14}N_2$   
 Myristicin  $C_{11}H_{12}O_3$

Naphtakrihydridin  $C_{42}H_{24}N_2$   
 Naphtobenzofluorindin  
 $C_{22}H_{14}N_4$   
 Naphtochinoxalonaftazin  
 $C_{22}H_{12}N_4$   
 Naphtofluorindin  $C_{26}H_{16}N_4$   
 Naphtophenanthridin  
 $C_{17}H_{11}N$   
 Naphtophenanthridon  
 $C_{17}H_{11}ON$   
 Naphtophenoxazon  $C_{16}H_9O_2N$   
 Nerol  $C_{10}H_{18}O$   
 Nerolidol  $C_{15}H_{26}O$   
 Nigrotinsäure  $C_{11}H_8O_3S$   
 Norcocaflavetin  $C_{20}H_{14}O_4$   
 Norcotarnon  $C_{10}H_9O_4$   
 Noryohimbin  $C_{20}H_{22}O_4N_2$   
 Nukleotin  $C_{80}H_{142}O_{18}N_4$

Okto glyceyl  $C_{16}H_{24}O_8N_8$   
 Olivaceasäure  $C_{17}H_{22}O_6$   
 Olivacein  $C_{17}H_{22}O_6$   
 Olivetorsäure  $C_{21}H_{26}O_7$   
 Olivil  $C_{20}H_{24}O_7$   
 Ozobenzol  $C_6H_6O_9$

Palabieninsäure  $C_{17}H_{26}O_2$   
 Palabietinolsäure  $C_{16}H_{24}O_2$   
 Palabietinsäure  $C_{20}H_{30}O_2$   
 Pannarol  $C_8H_8O_2$   
 Papaveramin  $C_{14}H_{22}O_5N$   
 Parasaccharin  $C_8H_{16}O_6$   
 Parasaccharon  $C_6H_8O_6$   
 Parasaccharonsäure  $C_6H_{10}O_7$   
 Pepton  $C_{22}H_{30}O_{16}N_7$   
 —  $C_{32}H_{56}O_{18}N_8$   
 Peradrenalon  $C_9H_8O_4N$   
 Phaseolumatin  $C_{10}H_{17}O_6N$   
 Phaseolumatinsäure  $C_{10}H_{15}O_4$   
 Phellogensäure  $C_{21}H_{40}O_4$   
 Phloraspin  $C_{22}H_{24}O_8$   
 Photosantoninsäure  $C_{30}H_{42}O_6$   
 Pikroglobularin  $C_{24}H_{30}O_7$   
 Pinocamphorylalkohol  
 $C_6H_{16}O$   
 Pinophoron  $C_9H_{14}O$   
 Piperidocodid  $C_{23}H_{30}O_2N_2$   
 Pleopsidsäure  $C_{17}H_{24}O_4$   
 Podophylloresin  $C_{19}H_{12}O_4$   
 Polystichalbin  $C_{25}H_{32}O_4$   
 Polystichin  $C_{25}H_{32}O_4$   
 Polystichocitrin  $C_{24}H_{28}O_8$   
 Polystichumsäure  $C_{25}H_{32}O_4$   
 Porin  $C_{48}H_{70}O_{16}$   
 Porinin  $C_8H_8O$   
 Porinsäure  $C_{11}H_{12}O_4$   
 Porphyrindin  $C_{10}H_{16}O_2N_8$   
 Prolylalanin  $C_8H_{14}O_6N_2$   
 Protococasäure  $C_6H_8O_2$   
 Protoisococasäure  $C_6H_8O_2$   
 Protolichesterinsäure  
 $C_{18}H_{30}O_5$   
 $C_{19}H_{32}O_4$

Protopapaverin  $C_{19}H_{10}O_4N$   
Pseudoaspidin  $C_{25}H_{32}O_8$   
Pseudocerebrin  $C_{44}H_{92}O_8N$   
Pseudopapaverin  $C_{21}H_{21}O_4N$   
Purpurogallon  $C_{11}H_6O_5$   
Pyrophthalin  $C_{14}H_{10}ON_2$

Ramalinsäure  $C_{30}H_{26}O_{15}$   
Resorcinanthrachinon

$C_{28}H_{18}O_4$   
Rhein  $C_{15}H_8O_6$   
Rheosmin  $C_{16}H_{12}O_2$   
Rhodinal  $C_{10}H_{18}O$   
Rhodinamin  $C_{10}H_{21}N$   
Rhodinsäure  $C_{10}H_{13}O_2$   
Rhomnol  $C_{30}H_{51}O_{27}N_{14}P_4$   
Ricidin  $C_{16}H_{18}O_4N_4$   
Ricin  $C_8H_8O_2N_2$   
—  $C_{16}H_{18}O_4N_4$   
Ricininsäure  $C_7H_6O_3N_2$   
Rimusäure  $C_{16}H_{20}O_3$   
Robigenin  $C_{15}H_{10}O_6$   
Robinin  $C_{33}H_{40}O_{19}$   
Rutin  $C_{27}H_{30}O_{16}$

Samandatrין  $C_{21}H_{37}O_5N_2$   
Santolsäure  $C_{15}H_{22}O_5$   
Santoronsäure  $C_{10}H_6O_6$   
Santorsäure  $C_{13}H_{18}O_8$   
Sapogenin  $C_{86}H_{50}O_6$

Saponarin  $C_{16}H_{22}O_{11}$   
Saponin  $C_{15}H_{22}O_{10}$   
Sapotoxin  $C_{25}H_{36}O_{10}$   
Saxatsäure  $C_{25}H_{40}O_8$   
Scammonolsäure  $C_{16}H_{30}O_3$   
Scombrin  $C_{32}H_{72}O_8N_{16}$   
Sepsin  $C_5H_{14}O_2N_2$   
Skatosin  $C_{10}H_{16}O_3N_2$   
Skimmianin  $C_{33}H_{50}O_9N_3$   
Solanidin  $C_{30}H_{61}O_9N$   
Solanin  $C_{53}H_{87}O_{18}N$   
Sophorin  $C_{27}H_{50}O_{16}$   
Sparteinoxid  $C_{15}H_{26}O_3N_2$   
Sphäritalan  $C_{30}H_{44}O_2$   
Spilanthin  $C_{15}H_{30}$   
Spilanthol  $C_{37}H_{64}O_3N_2$   
Spongosterin  $C_{19}H_{32}O$   
Stictaurin  $C_{38}H_{22}O_9$   
Strophantin  $C_{30}H_{46}O_{12}$   
Sturin  $C_{34}H_{71}O_6N_{17}$   
Suprarenin  $C_9H_{13}O_3N$

Tacamahinsäure  $C_{49}H_{72}O_2$   
Tacamaholsäure  $C_{15}H_{25}O_2$   
Tacelemisäure  $C_{37}H_{53}O_4$   
Taceleseren  $C_{15}H_{24}O$   
Takoresen  $C_{16}H_{25}O$   
—  $C_{21}H_{33}O$   
Tetrajuajakchinon  $C_{28}H_{21}O_8$   
Tetrarin  $C_{32}H_{32}O_{12}$   
Thujamenthen  $C_{10}H_{18}$

Trieylen  $C_{10}H_{16}$   
Trinaphtylenbenzol  $C_{36}H_{18}$   
Tryptophan  $C_{11}H_{12}O_2N_2$

Umbellon  $C_{10}H_{14}O$   
Urobromalsäure  $C_8H_{11}O_7Br_3$   
Uroferrinsäure  $C_{35}H_{58}O_{10}N_6S$   
Usnidinsäure  $C_{18}H_{18}O_8$

Valaktenbernsteinsäure  
 $C_9H_{12}O_6$

Valaktenpropionsäure

$C_8H_{12}O_3$

Vernin  $C_{10}H_{19}O_5N_5$

Veronal  $C_8H_{12}O_3N_2$

Vetrol  $C_9H_{14}O$

—  $C_{11}H_{18}O$

Vetiron  $C_{13}H_{22}O$

Vetiven  $C_{15}H_{24}$

Vetivenol  $C_{16}H_{26}O$

Xanthanwasserstoff

$C_2H_2N_2S_3$

Yohimboasäure  $C_{20}H_{26}O_4N_2$

Zellobionsäure  $C_{12}H_{22}O_{12}$

Zersäure  $C_{28}H_{22}O_{10}$

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